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## PRACTICE OF MEDICINE

# ON THOMSONIAN PRINCIPLES;

CONTAINING

A TREATISE ON ANIMAL LIFE, CAUSE AND EFFECT,

WITH

THE NAMES GIVEN TO DISEASES AND SYMPTOMS DESCRIBED,

INCLUDING

Prescriptions for Practice, Selected from Different Authors.

ALSO

A DESCRIPTION OF THE VEGETABLES MADE USE OF, WITH DIRECTIONS FOR PREPARING.

BY WILLIAM WILSON.

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### TO THE READER.

This work is presented to the public as a practical guide in the treatment of disease, in accordance with the basis principle for medical conclusions, including the practice discovered and promulgated to the world by Samuel Thomson.

The author has for some tweuty-five years past, intently investigated the grounds of the Thomsonian basis principles and practice; and, also, the basis principles that govern the practice of which said reform opposes, and now stand most unhesitatingly confirmed that Thomson's basis is right—right by a recognition of God's fixed laws of the motive force of power and effect—that carry on the process of the vitalization of matter, its purification, conservation and growth of the mass of all living earthly substance. Now the man, or set of men, established on the unalterable laws of creation, leaves nothing further to be sought for, unless a materia medica be discovered that better carry out the principles in practice.

WM. WILSON.

### SCRAP FIRST.

Justice Liebig, in his work, under the head of what he calls Animal Chemistry, includes and claims as truth, every point in the constitution of the vital state, including the constitutional forces, which forces are maintained in the warm blooded animal by vitalizing chemistry, and says that an agency entirely distinct from the vital power, with which it has nothing in common, and that there are thus, two forces in activity together. Also, that the most energetic volution is incapable of exerting any influence on the contraction of the heart, on the motion of the intestines, or, on the process of secretions. And further says: The effect of this must be regulated by certain laws, which laws may be investigated, and these laws must be in harmony with the universal laws, resistance and motion, which preserve in their courses the worlds of our own and other systems. Now to Liebig's first point. That there are thus two forces found in activity together; here, although, all classes of men receive the idea of two motive powers in activity together in the living body, but a large and overwhelming majority do attribute to an immaterial agency, as being that all-pervading, ever-present motive power of effect, maintaining the vital state, and not a law of power which may be investigated. we find a full stop directly at the starting point. Agencies of immaterial powers cannot be investigated or serve in the slightest degree as basis to govern man's practical actions, or medical calculations.

### UNITY OR ONENESS OF DISEASE.

The want of a settled adoption on facts as they are, on this point, has misled medical conclusions, and medical practice, to great and fatal error. But, without notice of what any writer has said in favor of its multiplied division. I will relate what certainly appears facts as they are. Disease is what man, by general consent, has ever saw proper to call it; and in all its grades and localities, from the slightest dyspepsia to the vicious state of the small-pox, disease is what its name imparts. Death itself, so far as it may have advanced in particles constituting blood and flesh, which particles, in their dying process, become non-receptacle canker dross cinders, and diminishing the electrical fire of vitallzing chemistry. In all cases there is a diminished state of the motive power and cause of the circulation, an overruled and obstructed state of all the circulating fluids and gases. The most safe and speedy parturation and removal of these dying particles, with all foreign and offending substances, with the re-establishment of the strength of the circulation, constitute the pursuit of medication.

Disease is a unit in the light of the subject, as being a chemical process towards corruption; and the remedy is undisputably a unit, by being the work of the electrical fire of vitalizing chemistry, digestion. But the act of parturation unlocking the adhesive hold of diseased particles, is a terminating effect on either point in chemistry; that is vitalizing or putrifying.

### SCRAP 3.

INHALING THE SMOKE FROM BURNING PEPPER, IN CASES OF CHRONIC BRONCHITIS OR DEEPLY SEATED COUGH, ATTENDED WITH FREE EXPECTORATION.

In a conversation with Samuel Thomson in the fall of 1838, he said that there were cases of deeply seated complaints of the lungs, in which the inhailing of pepper smoke was the most effectual remedy that could be used. Regarding this kind of practice as rather severe, I made no attempt at testing its efficacy until some four or five years after this interview with the old doctor. During the summer of 1843, a Mr. Colcord, a gentleman with whom I had some acquaintance, called at my house and desired the privilege of a room to take a "pepper smoking," as he termed it. He informed me that he had taken over thirty courses of medicine in a Thomsonian Infirmary in Massachusetts, for chronic bronchitis; but that nothing he had ever done had afforded him so much relief as the pepper smoking. He stated that his cough was harrassing in the extreme, so much so that he had obtained but little sleep for some months, and had finally come to the conclusion that his disease was incurable. As a last resort the pepper smoking was tried, and was surprisingly successful. It was done in the following manner. Being placed in a vapor bath, a live coal well burned was put upon a shovel and held under the blanket that enveloped the patient, and a teaspoon full of cayenne thrown upon the coal. On first inhaling the smoke, Mr. Colcord said he experienced a feeling of suffocation; but very soon the secretions flowed from the mouth, nose and eyes, and a universal glow of stimulation took the place of oppression; and after inhaling the smoke a few minutes, and having coughed and raised thick matter that seemed to come from the lower part of the lungs, he went to bed and slept all night without coughing; and that this was the first night that he had rested well for three months. He continued inhaling the pepper smoke daily and improved rapidly, so that at the end of three weeks from the time he commenced with the pepper smoking he thought his disease was cured. He had taken cold on his journey to this city, and his cough had returned; but the inhalation of the pepper smoke cured it. On this occasion he merely threw a cloak over his head, the shovel with the burning pepper being placed on the floor between his feet.

In the spring of 1850 I was attending a man 54 years of age, who had been affected with a most harassing cough for two years, attended with a free expectoration. There was much general debility, and the cough had become so

troublesome that he was unable to rest at night. After having administered several emetics, preceded by a vapor bath, and other remedies had freely taken some weeks without affording the relief desired, I resorted to the pepper smoking, which was done in the following way: Whilst in a vapor bath, and after the system became warm and free perspiration induced, a small iron skillet containing one or two small live coals was placed under the blanket between his feet, and a teaspoon full of cayenne pepper thrown upon the coals. As soon as the smoke was breathed by placing the face under the cover, it occasioned, as any one would suppose, severe coughing. As the inhalation of the smoke became very oppressive, the patient would uncover the face and take fresh air. This operation was repeated every evening for some weeks with great relief, and was continued at intervals for some months. This gentleman by this treatment, together with country air and travelling, was restored to a comfortable state of health, which still continues.

From its results in the above and some other cases where this remedy has been tried, I am well convinced that it may be employed in many cases of chronic debility in the bronchial mucous membranes, with marked benefit. The kinds of cases in which it would be proper to resort to this process of inhalation, are those of chronic bronchitis, attended with a pretty free expectoration. In cases of tubercular consumption, or abscess in the lungs, the pepper smoking would probably be worse than useless. We would call the attention of practitioners to this subject of inhaling the pepper smoke, as there has not been sufficient experiments made to enable us to judge to what extent it may be employed with benefit. I distinctly recollect hearing Dr. Thomson say that there are cases that nothing else but the pepper smoking would reach.

In attending upon the case above mentioned, I inhaled the pepper smoke necessarily as it was in the room; and although it excited coughing, there was an agreeable stimulus imparted to the system, and I imagined my own lungs were thereby strengthened.

Since writing the above, I have administered the pepper smoke in a case of chronic bronchitis—a very deeply seated case—without the vapor bath. A saucepan containing boiling water was placed upon the floor and some live coals well burned, thrown in the water to produce a steam. The patient sitting in a chair, with a cover thrown over the head, and then placing a shovel containing a live coal on the saucepan, the pepper was thrown on the coal, and the smoke inhaled. Some relief has been afforded by these operations, and the patient continues the treatment.—Comfort.

### ERRATA.

On page 28, eleven lines from bottom—speculative institution, Should read, speculative medical school institution.

Page 32, third line from bottom—circumstantial error, should read caused error.

In page 266, the author's name was neglected. Some other errors of the same kind in other parts of the work occur.

The compiler of this work has chosen J. W. Comfort's Thomsonian practice, published 1843, for selection of practical directions, on grounds that it is least objectional in point of basis principles for medical conclusions, of any work he has seen, except Thomson's own. From this work of Comfort's he has selected largely, without any change of words on any point. But in some cases, in giving cause of disease, Comfort varies from important points. A sample of which will be found in page 279, six lines from bottom: Vital powers weak. This by Thomson's basis, should read: The determining force of organised heat, is weak force and resistance.

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# A TREATISE ON ANIMAL LIFE.

### CAUSE AND EFFECT.

### SECTION I.

By the wise order of Creation, there is a principle inherant in matter, when in the living state, which leads the living being to exert all the living powers and skill it possesses to support—guard and prolong its present mode or state of existence. This all important principle, called the love of life, has caused man—when himself or friends were attacked by disorder—to exert all his powers of mind and body to obtain remedial agents to avoid, if possible, the threatening dissolution. Thus, in every age, time and place, man has been experimenting and trying every article as medication, and every mode of nursing thought could conceive—consequently embracing the worst as well as best of treatment—whereby large portions are injured in place of being benefitted by the treatment they receive in that which was given with intent to relieve.

Now that this is the real condition of the present Medical aid, and that too where it is given in the strictest accordance with the science as now taught in the almost universal schools of medicine, few will contradict. The why and the wherefore that this time-honored science doth so exist, is the object of the following undertaking.

There are now amongst us Medical Reformers who maintain that this is not an indispensable state af man, growing out of the law of creation; that the God of Nature has not mocked his creature man, by giving him so strong an instinct to aid nature,

and withheld from him the powers of comprehending and obeying the laws of the living state in matter; and who further maintain that the Science of Medicine as now taught in the popular schools, has been brought up for many generations under false theories, overlooking the common laws of matter, rejecting and neglecting the true laws of the association of matter on which the living state depends; in want of which the science has no system, for want of which it is built up of an endless mass, foreign from the subject, and adopted remedies that waste the means that maintain life.

These Reformers sprung from, and the most consistent amongst them, are the direct followers of Dr. Samuel Thompson, who took his position against the old regular schools some forty years past. The amount of his theory may be spoken as follows: That the living state in matter is maintained by a peculiar association of matter, the constituents of which may be named as follows: Earth, Water, Air, Caloric, Electricity, &c., compose the constitution, the immediate condition of which is to be sought for. That organised heat is the motive force and cause of circulation, by maintaining the enter exchange with the surrounding aliments the body inhabits. For words for further explanation, I will apply not to any reformer, but to the New York Journal of Medicine. That organ of the medical faculty, in 1849, says: "The secret of remedy would be found in the cause of the circulation -respiration." Other learned characters of the same faculty finds the blood receiving a constant current impartation of the oxid of the air by medium of the lungs, on reception of which the blood bounds and foams; the heart being charged, expands and contracts, sending forth the blood with its cargo of animal electricity on its life imparting mission. The association of matter on which the living state depends, cannot exist without the presence of this constitutional force. But this association established in its own invelope organism, sets up heat manufacturing, and thereby establishes a motive power holding a constant flow of the animalising qualities of the air passing through the system, regaining and maintaining. This animal electricity thus manufactured, brings into existence the powers of kindred affinity, adhesion, cohesion, &c., in all the particles of matter belonging to the living body. These are the preservative and conservative principles or powers that maintain in health, or regain from disease.

Heat acting on matter in the lap of its opposite, cold, is that proud agent that holds all matter in motion. Oh, did you mean that heat was life? No, but as living is heat manufacturing, we know, by aid of organism, it establishes a motive power. This force maintains a perpetual supply of the vivifying principles of the air, which makes animalising use of the materals of organism. This is the motive power to support by intentions of cure. Passion, volition, &c., are principles and powers inherent in matter while in the living state with which art has nothing to do. The animal eats, he drinks, he breaths, by the latter operation he obtains the materials that make animalising use of the materials of the former. Digestion goes on with grade of perfection in proportion to the existence of this electrical constituent from the air, inhabiting with its passing action in the system, the maintenance of which is the keystone of all intentions to cure.

There are many articles that thin the fluids and absorb and mitigate viscid humors. Also, such that spur special discharges, which often are indispensable, but none of which may be used in class or form that may lessen the means of obtaining this important constituent: oxid or electricity from the surrounding aliment, the body inhabits.

Matter awaits two overruling principles or powers, and is affected according to the advantaged sway one may possess over the other, by certain revolving and unalterable laws, that regain and maintain the living state or its reverse.

It doubtless may be perceived, that the foregoing endeavor, is to point to the understanding the existence of a motive power existing in the living body, which is not a living power, but a casual or organic force. 2d.—That this force, by aid of organism, obtains from the surrounding aliment air, certain constitutional parts of the common air, freed from its former combinations and associations. Thus entering organized matter with its peculiar powers and effect, which beget and maintain the living state, hold-

ing uncontrolable sway through all its impire organism while it holds the ascendancy. 3d.—Organized matter obtains from the air this peculiar associate, not only by principle of affinity, but by force, which force must be sacredly maintained by all endeavors of cure. 4th.—The cold-blooded animal and vegetation is dependant on the evaporative force. The force of the warm-blooded animal is heat-manufacturing in its own body, and is thereby provided to live in a wide range of temperature.

The law of the living state in matter hath abundant evidence of its truth by well known laws in matter. But there is such an unaccountable propensity in man to neglect and overlook those plain and common sense laws, and dive for hidden mysteries that have no existence, that it seems but useless to augumentively point them out. But this is an all-important point. For the end of all the studies of the man of medication is to preserve life, and this cannot be so well done, unless they know and have a right conception of the unalterable laws of the living state. With intent to be better understood, I here will relate a practical report:

Dr. N. C., an eminent practitioner, practicing in a cholera region, in the spring of 1849, writes to a friend and says that, when some of his cholera patients had sunk to what was called the blue stage, he administered certain doses of warm balm tea, at certain intervals, from which they revived like a charm, and soon were well. The principle of the cure was this: The liquid on the stomach was far above blood heat in that stage, which heat established a determining force, maintaining a vacuum or suctional force on the circulation, which regained an increase of the vivifying principle of the air on the blood, the heart being also recharged with increased strength sends it torth on its life imparting mission.

An eminent modern writer remarks as follows: From a retrospective glance of the history of our science, we are forced to acknowledge that there is no subject which is more eminently calculated to humble the pride of human reason than this one. The human mind has been engaged for nearly three thousand years. Theories have risen and sunk again in rapid series of succession. In fact, no physician whose works I have read, has ever discovered or even hinted at the nature and cure of fever.

Now let this subject read thus: The human mind has been exhausting its skill for near three thousand years to define the nature and cure of fever, without recognising the alimentary, organic or determining force, as prior to and independent from the living state, which force is the maintainer of the constitution of matter on which the living state depends. Fever being the overruled state of this exhaling force, the attributing to the living powers that which belongs to the organic force, hath bewildered the understanding.

The simplest question that ever presented itself to the mind of a human being, may be presented to the mightiest genius on earth, and if he mistakes the mode of investigation, and takes it for granted that, in order to ascertain the truth he must solve a number of abstruse and perplexing questions that are foreign from the subject, the probability is that he never will ascertain the truth as to the question proposed, but will end just as ignorant as he commenced them, or come to some grossly absurd conclusion.

If a speaker on the theory and practice of medicine should commence at the starting point and stop when he had nothing further of instruction to say, his lecture would be very short. But where is the starting point, that is in reach of human understanding? In reply to this question, truth will interfere with some very universally received views of what is called physical Astronomy. Comstock's Philosophy, on the motions of the planets, says thus: It is said that when the great Sir Isaac Newton was about to discover the great truth, that gravitation is the cause that keeps the heavenly bodies in their orbits, &c. What universal credit an error may have. Gravitation is a dependant power. Now to show on what it depends. For words to start on, we will take from the 1st Chapter of Genesis, 8th verse: And God called the firmament Heaven. Firmament impenetrable vacuum of the absence of heat which locks all substance in icy stillness. In the midst of this firmament is placed that immense body of heat, the Sun. Its powers of overcoming cold gives it a place, but being opposed on all points, it is stationary. But substances like the Earth are affected by heat, and flees from it into the lap of cold, till it finds a balancing point of these two powers, where the Earth

is destined forever to dwell under their contending influences, each acting with immense and unceasing force to constant motion, producing day and night, winter and summer. Between these forces gravitation finds existence. But gravitative weight or pressure finds an indispensable office to fill in the materials of the Earth, in maintaining the living and growing state of all earthly substances.

There is no point in the law of matter furnishing more demonstrative evidence of their existence than this one. That is, that heat established in an organized body establishes a motive force, which force forms joint union with the force of the surrounding pressure by means of said organism, which force holds interexchange with the surrounding aliments. By this force, the living and growing state of all earthly substances is carried on. Receiving from food from the points of their deposite in the system the materials of flesh and blood, and from the lungs. The electrifying materials of the air, that make animalising use of the materials of organism, which digests, animalises, conserves and preserves in health or regains from disease, and is a remedy for all the aches and ills blood and flesh is heir to. Independent of this animal electricity, there is no curative in all creation. All that medication can do, is to aid the circulation in regaining its departed amount of this all imparting constituent.

There is but two points can possibly materially agitate the medical world, which is, that the living state is supported by powers as above described, or that it is supported by principles and powers superadded, which is incomprehensible and unknown. This latter sets the ship of medication afloat on the main ocean without compass or guide, while the other is systematically bound to a point.

Question.—What are the points of difference between the true reformer and the regular faculty? Reply—The reformer is, by system, bound to his utmost skill to regain and maintain the departed amount of animal electricity or life imparting principles of the air, by improving the liberty and strength of the determining or interexchange force—the inhaling and exhalants. While the old faculty have adopted remedies that waste the means

of regain, and do directly deoxidate and disinherit blood and flesh of this conservative constituent, which sets the points of difference as opposite as noonday from midnight.

As a recapitulation of this subject, there are no words more comprehensible than those selected by Dr. Samuel Thompson, the author of the present agitated reform, which words are these: Be sure you keep the determining powers to the surface, by keeping the inward heat above the outward heat, or the fountain above the stream, and all will be safe.

I here will state some sketches of the history of the progress of this reform.

Said Thompson obtained the Patent Right for his system of practice, 1813, and had, in a short time, his books and medicine spreading through all parts of the country by the hands of many agents. Now, in the year 1825, or '26, a certain Dr. H. Howard, who seems to be of Columbus, Ohio, became his general agent, who was very dilligent in spreading the practice through many parts of the States. But in his explanatory lectures, he set forth and maintained that the author was mistaken and in error in his conclusions that the principal or constituent heat was the key, giving grade to animal life, and represented that the only use of heat in the economy of the living state in matter was the giving a proper pliability to the fluids and solids of the body, with much other fault-finding, especially of the theory or principles that were set forth to govern the practice. Now, Dr. Thompson perceiving the magnitude of the evil of mystifying that law of force that maintains the living state, and that unhinging the principles, would set his prescriptions for practice, like a ship that had lostits anchor, subject to be drifted before every popular breeze that might blow, withdrew Howard's agency, denying all connection with him and his party, or their practice. By records now extant, it seems that this took place some three and a half years after Howard's agency first took place. But Howard was now well seated in the Thompsonian fame, and he and his party reprinted the practice, independent, making such alterations as they saw proper. Well, amongst the favorites of reform, these books had a most rapid circulation, at high profits. Howard and

his party being thus uplifted, especially in a pecuniary view, soon had a second edition published in three volumes. About this time, according to the then printed accounts in their circulating papers in '33 and '34, the cholera visited Howard's family, and his practice proved unsuccessful. Soon after this fate of Howard's family, said Thompson put a piece in the most extensively circulated papers then in their concern, charging Howard to this amount: That he had but benighted his own understanding in the unalterable law of animal life, which no being could violate and escape the penalty; by which violation he had lost his family, or in other words, that Howard, by his improvement, had lost six of his family including himself. Now, from Howard's fate, some of his chief followers declined teaching and prescribing his additional remedies, (this part of his improvement will be seen in his 2d edition, vol. 1, page 121,) but maintained war on the theory on all occasions, representing to public view heat in the light of temperature not as power. Now to Howard's improved system, which he says is founded on physiological principles.

In the above named volume, page 34 and 35, under head of the powers which keep the organs in motion, he very rightly comes to a point: That the living powers are kept up by the substances of food, water and air. But to the powers that bring about and maintain this peculiar association he seems perplexed, and says we are not sure that we have made choice of the best words in the language to express the idea of that force. (This sentence is in error, the lack is something to represent.) But now as if with fearing the reader would discover the force, he makes an instantl eap on the principles of heat, and says, that Hippocrates and the greater part of the ancient philosophers maintained it was heat, and Dr. Thompson of the present day has hit on the same idea. and Toortelle, in his work entitled the Principles of Health, endeavors by many facts and arguments to establish the same doctrine. But Howard says, not stopping to controvert any of these various opinions: I will briefly give my own. Well, pursuing his rambles to a point, we find his own opinions are, that this power remains undefined. Thus, the first link that can constitute medication a science is gone, and improved reform set loose to range wide creation over.

Now, Howard starts out headed Philosophy. Well may it be asked what has philosophy to do with mistary-matters undefined? Now in what does this reform consist? This question is readily answered. Reform practice, as standing when Howard first became a leader, was systematically to a point, which is, that by the wise order of creation, the principle of heat by means of organism is the motive force that maintains the constitution of all living matter. The re-establishing and maintaining of the liberty and str. ngth of this force is the indication of cure in all cases. Thus reform was anchored within narrow limits; within the grasp of all the human family that are of a fair philosophical capacity. But Howard's improvement unhinges reform from the exh.bition of this law of power that maintains the living state. Thus the potented science of medication has no point to start from, nor any stopping place. Now it is a science requiring great school learning and study.

Again, in said Vol., page 49, he says, some of ancient and molern times have supposed, from the important influence heat ex rcises over the animal functions, it was really the principal of life, (leading point in the motive force.) This, he says, indeed, is the theory of Dr. Thompson, whose opinions have been so extensively disseminated in the United States. But he says this anciently exploded doctrine has been elsewhere shown. (See Dr. Hance's lecture, delivered in Columbus, Ohio, in 1830.) Here we have the date of the assassination of the exhibition of the law of force on which the living and growing state depends. By its own guards in the 17th year of its age, and its rival mysticism, matters undefined, triumphantly took its seat, flourishing greatly, establishing schools well patronised. But he says this is not the first time it was anciently exploded. When? Why, Hippocrates and some of the ancients held the same doctrine. Yea, we add, and by a fair inference from ancient history, he adapted his remedial agents in accordance with it, and his success proved so great in the healing art, that his fame spread far and wide, but ere a full generation had passed, his improvers had explained it out of sight. This appears to be some 2,000 years passed, and scarcely heard of since, till the present generation. Now, to reject what does really exist, and search for what has no existence, what can 2,000 years more of school learning do?

Some of t'ese reform schools have existed many years, patron. ized with many stulents. We will notice a sample of their practice-

Dr. J. D., in '49, reports a case of measles which he lost. He says his treatment brought the eruptions to the surface, but the vigor of the arterial system was too effeminate to keep it there, hence, it disappeared, and the patient died. Reply of a true Reformer: The force of the heart and arteries is a living force which has no control over the enterexchange force beyond its powers of generating heat, which is the force that removes the virous humors from the blood and holds it out of reach of the return circulation, which force is organized heat, uniting with the force of the surrounding pressure by means of said organism to joint action of force to the maintenance of the enterexchange with the surroun ling aliments. This was the force that was too effeminate to keep the eruptions to the surface.

The steam bath and shower bath in their time and place constitute a large portion of the means of re-establishing this force. The regain and full maintenance of which would have saved the patient, if there was a constitution to have obtained the point.

Second Sample of improved Reform Practice, which is taken from Dr. Beach's Reform.

### INDICATIONS OF CURE.

1st.—Lessen Arterial Excitement.

2d.—Restore the Secretions and Excretions.

3 d.—Equalize the Circulations.

4th.—Remove Local Congestions.

5th.—Support the powers of the system.

It is most demonstratively plain that these indications can be filled only by re-establishing the determining or enterexchange force, with liberty and strength; to the exhaling from the system the worn out gases and fluids, which exciting causes keep up excess of arterial action. This lessens arterial excitement.

2d. This force maintains the secretions and excretions of all living and growing substance.

3d and 4th. This enterexchange force established in organism acts not only on the external elements the body inhabits, but on the

return circulation of the whole veinous system, with a suctional effect in proportion to the amount present of that force, which is the means that equalizes the circulation and removes local congestion.

5th. By this force the body receives the life imparting principles of the air from the lungs, which constituent imparts power to the system, which oxid or eelectricity digests, animalises, conserves and preserves in health, or regains from disease, in all the ills flesh is heir to, whether brought about by aid of medication, or the strength of the constitution.

The reception of the truth of this elementary force, which inhabits all living matter, with its office in the living state in said matter, sets the science of medication in perfect noonday to all fair capacities of men. But to overlook, neglect and reject this all important physical law of the great Creator sets medication in midnight darkness to the greatest genius on earth.

To enumerate half the errors which the rejection of this law of force has lead medical writers into, to the great injury of living man, would be an endless task.

The living state in matter is maintained by a peculiar association of matter, which association takes place only by favor of a previously provided organism, as in seeds of plants, eggs of birds and embryo animals. The egg contains an embryo animal entire; its shape invisible, in a colorless 1 stic substance, with a negative but a conservative charge of the constitutional collection of the constituents for the living state, in which it can rest in safety many days in common temperature. But with the addition of a grade of heat that overules the surrounding pressure acting on fluid aliment, by means of organism forms joint union with the pressure force to joint action of force, to the enterexchange with the surrounding aliments, receiving an increase of the life imparting principles of the air, the electrical charge becomes positive, and life is apparent with living powers. Now, living motion is heat manufacturing, and in process of time the living animal acquires a strength of heat maintaining to the extent of holding the ascendancy over the pressure force, independent, whereby it can live in a wide range of temperature.

Now if I was asked why such intentness on theory or principles

to govern practice in medication, I should answer that a very large portion of mankind that come to a premature end, do so by direct volation of the laws of animal life in their acts of medication, or neglect of the best means, all for the want of a right conception of these unalterable laws—not the unliscovered compounds for medicine.

I will repeat on this subject as follows: Let the treatment be what it may, remedy for disease is found in the cause of the circulation—an effective motive power, increasingly re-established, made plain from the fact that established it is, in the embryo animal, prior to the color of blood, or the slightest power of volution. On this, we are told this is the all-pervading, ever-present power of God. To this we fully agree, but labor to show the fact that it is God's fixed laws of power, which laws his creature man should recognize and obey in his acts of medication, which motive force is the force of organized heat, united my means of said organism with the force of the surrounding pressure, to an effectual bearing on all points of the circulation. The re-establishment of the liberty and strength of this force to its normal stand, expels fever, removes congestion, equalizes the circulation, and replenishes the system with the life imparting principles of the aliments. This constitution maintains an electrical glow maintained by vitalizing chemistry, which gives grade to the vital state of every particle of blood and flesh organ, or part of an organ of the whole system.

A short lecture can convey all that can be usefully spoken, including both principles and practice, in true medication.

Thus it has no place in a speculative institution—the law of creation forbidling.

A systematic and safe practice, constitutionally, belongs to the people generally—families, mothers, and nurses. Of all the business pursuits of man, there is none in which the seeker and pursuer is so badly humbugged, as is the stulent of medication, which grows out of the fact that the constitution of matter, including the constitutional forces, are the true basis principles for medical conclusions, and the sciences that fill the medical school institutions, with all its branches, have (by settled adoption) the vital powers as motive force and cause of the circulation. Vitality

is the object sought for, not the means to obtain. Thus the student is set in by the tutor, beyond and ahead of the object of pursuit.

The reform schools, still more faulty, base direct by profession on the vital powers, and Professor Curtis, of Cincinnati, carries it so far as to call inability disease. Thus all the schools are in the same channel—fixing up every conclusion with cart before the horse, weaving a double mask, which would blind the understanding of the greatest genius of man, on the subject he seeks.

Reform in medication, and basis principles for medical conclusions, greatly agitate many of the present generation; and we have great reason to believe, that no age ever stood in need of a more thorough change. But not a reform from the present general practice, to something mysterious and undiscovered; but a return to that which was practiced in early ages of man. Man in his more primitive state is without theory basis principles for medical conclusions, either to lead him astray, or maintain in the right. Thus he is free to the language of objects around him, which all refer to the constitutional forces. In this state of the matter, selections from practical result is a fair guide. The science of medicine, then simple prescription, handed down from father to son; medication, then considered the rightful property of all-honor, dignity and profit, having but little effect in the case. In this state of medication practice is quite safe, and near as certain as man has a right to expect. This is well established, by the result of the practice of less civilized nations of the present day.

Dr. Watterhouse, who received his education and entered his practical career in the latter part of the 17th century, and in the fore part of the 18th, was lecturer on the theory and practice of medicine for a period of twenty-seven years—who, in reply to interrogations on this subject, says: That the Greeks, the Jewish, and the Roman physician, through all the Roman emperors, and down through all the dark ages, and till long after the revival of letters, the art and practice of physic was the result of experience, and was a collection of facts, handed down from tutor to pupil. And further, says: Anterior to 1745, the study and practice of physic was little different if any from that of Dr. Samuel Thomson, the patriarch of steam and lobelia.

Now at this date, 1745, the circulation of the blood being fully recognized and taken hold of as basis for medical conclusions, the most minute anatomical investigations, now considered indispensable, not only for practical surgery, but for medical instruction, thence from the multifarious condition of the circulation, there is soon made a wide field of matter, sufficient to fill the most presumptuous medical school institution to the mislead of the student, from the fact that the student in his investigation is imperceptibly led to settle on the vital powers as motive force and cause of the circulation of all the fluids and gases, thereby establishing a false theory basis principles, which leads to false medical conclusions, to direct face-about from facts as they are.

Thus the discovery of the circulation of the blood, in absence of an infinitely more important discovery—that is, the motive power and cause of the circulation, God's fixed laws of the constitutional forces. This false theory or basis is the cause and establisher of a false practice, with materials the most dangerous the order of creation affords, with an effect as uncertain as unsafe. But this practice did as now it does, too far outrage the power of human philosophy to remain long unattacked. In little over fifty years from this date, 1745, Sam Thomson made the charge fully on the old school practice, in substance, that they were in extreme error in fighting and not nursing the constituent heat, declaring in favor of the constitution of matter, including the constitutional force of organized heat. This composes the basis principles of the Thomsonian practice, which practice was circulated with the people generally, as their right and duty to possess.

While thus in its natural channel with the masses in general, the spread and reception was truly great. But in process of time, less than twenty years of the progress of reform practice, certain old school students, having become advocates of reform practice by its unequalled success on their own persons—who, from their great literary acquirements, became the most active in its spread and noisy in its praise; a goodly number of whom, being blinded by the errors of the old school, could not perceive the real position of reform principles and practice—resolved on reform school institutions. Many of these reform schools have flourished since

1830. Now a sound common sense investigation of this subject will show to all fair intellectual capacities of man, the fact that of all the expenditures of fanciful man, none has less grounds to support on than have reform school institutions. This charge is made clear to the understanding, by review of what constitutes reform, here we will repeat that reform basis on the constitution of matter.

- 1. The living and healthy state is the constitution of matter in due order and proportion.
- 2. This constitution never existing complete only under a full, free and universal circulation of all the circulating fluids and gases.
- 3. The circulation is carried on by the constitutional motive forces, lead in train by the force of organized heat, which constituent heat, is maintained in the warm blooded animal by the electrical glow of vitalizing chemistry, digestion.

These now as basis principles, including the materia medica, that best carry out said principles in practice, compose reform in total. Age and experience can only add for the better, a short item to aggrandize the student.

But this is not the worst point in the case. The reform school institutions, to adorn its pretentions, takes all the matter with all its branches of science that fill the old schools, save some part of its fruits, poison and depletion. Thus the same overuling errors that misguided man in the old schools, is as effective on the students of reform schools—leading direct to the same channel.

Now in the above essay I have pursued a train of past events, that have been overlooked and neglected as being matters that had but little bearing on the subject. As such I will repeat on the points aimed at, as follows:

- 1. That before the discovery of the circulation of the blood, the science of Anatomy was studied for the benefit of practical surgery, and that only.
- 2. Before the discovery of the circulation, no casual event did ever occur to cause man to conceive that there was any point in the principles and practice of medicine, that was not equally as comprehensible to all fair capacities of human intellect—whether learned or less learned.

3. That in this uninterupted state of principles and practice of medication, the language of common nature leads to settle on the constitution of matter as basis principles, which basis lead to just conclusions. In this state of the science, medication is simple, safe, and as certain as man has a right to expect.

4. The misapplication of the discovery of the circulation, did establish false theory, basis principles for medical conclusions, which false conclusions establish a false practice, to the great injury of living man, to be remedied only by the application of the truth for basis principles, which is the constitution of matter including the constitutional forces, as proclaimed by Dr. Samuel Thomson.

5. The recognition of the constitutional forces as motive power and cause of the circulation, arrests the healing art out of all school institutions, by disrobing the medical principles and practice of all its useless appendage.

There is no point more clear to man, than the fact that by the circulation, every particle of blood and flesh of the whole living body is maintained in the vital state, conserved and preserved in health. The re-establishment of the liberty and strength of the circulation a'one can remove disease and restore to health.

There are many fanciful sayings of many writers called theories, but none of which ever had much bearing on medical practice.

But the error growing out of the wrong use of the discovery of the circulation of the blood, having a fixed basis, is most permanent, not to be removed only by recognizing of the true motive powers and cause of the circulation. This error is not attributable to any man or set of influential men, but is a circumstantial error, in which all fair capacities of man equally share and must be equal in casting off said error—school institutions have no power to do it.

### INTERMITTING FEVER-AGUE AND FEVER-

### SECTION II.

Ague and fever is a form of disease of very frequent occurrence in almost every part of the civilized world; and especially in the southwestern part of our happy country.

Systematic writers have adopted names for this form of disease, according to the season of the year in which it occurs. That which occurs in spring is termed vernal; and that in the fall, autumnal. Agues are distinguished also, according to the periods between the paroxysms. When they return within the space of twenty-four hours, they are called quotidian; when they return every other day, they are called tertian; when every third day, they are termed quartans.

The general causes of this form of disease are such as sudden changes of atmosphere from hot to cold, and from dry to wet; exposure to damp rooms; sleeping in damp or wet clothes; great fatigue; anxiety, loss of sleep; poor diet; breathing impure air, or the atmosphere impregnated with poisonous vapors, such as arise from the decay and decomposition of vegetable and animal matter; in a word, anything that has a tendency to depress the living principle, or to hinder the free circulation of the blood to all parts of the system. Dr. Comfort, very justly remarks that "the same cause or combination of causes, which produce ague in one, may cause dysentery in another, jaundice in another, and in another, neuralgia; whilst another still, who is possessed of a good constitution, and who is in vigorous health, may be exposed to the same causes of disease, without being affected.

The more perfect and active the digestive functions are, the less will be the liability to disease."

Symptoms.—The symptoms which present themselves in the forming stages of this form of disease, are such as are generally present in the forming stage of every other form of disease attended with fever, viz: a feeling of languor, a sense of debility or weakness; a yawning and stretching, which is the commencement of the paroxysm or chill. The face and extremities become pale, the features shrunk, the bulk of every external part diminished and the skin over the whole body appears constricted, as if cold had been applied to it. These symptoms continuing to increase, the patient becomes very cold; and universal rigors or shiverings come on; the respiration or breathing is short; the pulse frequent and small, and sometimes irregular; great thirst. These symptoms continue for an indefinite length of time, sometimes only a few minutes, at other times for several hours. Finally reaction commences and the patient experiences flushes of heat through the system which increase until the chill is gone and the fever fully established.

The reaction or hot stage is when the blood is forcibly returning to the external surface and extremities, and the skin being contracted and rigid, the heat is prevented from escaping, until it accumulates sufficiently to expand the surface and relax the skin, when the heat begins to escape and perspiration takes place and the symptoms begin to abate. Then the third stage of the disease sets in, called:

THE SWEATING STAGE OR CRISIS.—When perspiration is established, the symptoms begin to abate; the pulse becomes fuller, slower and softer, until perspiration is more general and profuse, fever gone; pulse natural, and an entire intermission of all the symptoms.

These stages, viz: the cold, the hot, and the sweating constitute what is called a paroxysm of intermitting fever. These paroxysms occur periodically, either every day, every other day, or every third day, and generally from one to three hours earlier. During the intermission or interval, the patient will, in some instances, be entirely free from all unpleasant symptoms, except debility.

Intermitting fever, like every other form of disease, is subject to various modifications, depending upon the circumstances under

which the disease occurs, in relation to the condition of the patient, and various other causes which may tend to modify the disease. Thus if the disease be connected with a torpid state of the liver, the skin and whites of the eyes will be yellow, and the patient will be said to be bilious, or that he has bilious intermitting fever.

TREATMENT.—On the approach of the chill, commence giving warm teas, such as sage, balm, pennyroyal, horsemint and the like. The patient should be in bed, and hot bricks or stones, wrapped in wet cloths, should be placed to the back and feet. Keep the extremities warm and moist, to facilitate reaction. If the patient complains of sick stomach, and his breathing is difficult, give him a teaspoonful of the third preparation of lobelia in a half tea-cupful of composition tea. Repeat the dose every ten or twenty minutes until he vomits or reaction is established. Continue the teas and bricks until the fever is broken up; then proceed to give him a thorough course of medicine. This you may commence by giving an injection of sage or white sumach tea, with a tea-spoonful of the pulverized seeds of lobelia in it. Repeat the same every ten minutes until you effect a stool. Then give him half a tea-cupful of some of the warm teas, with half a tea-spoonful of the pulverized seeds of lobelia in it; repeat the same every ten minutes; increasing the lobelia to a tea-spoonful and adding a small portion of salæratus, (say as much as the size of a grain of corn,) continue until he vomits freely, say three times. Then give him some gruel or milk porridge and let him rest an hour. If the fever increases and the breathing is difficult, repeat the course of medicine, commencing with the vapor bath, mild at first, increasing until it is sufficiently hot. Continue until perspiration is free and general. If the patient complains of faintness or difficulty of breathing, bathe the face and breast with cold water. Do not be afraid of doing harm by applying cold water, in this situation. A half bushel of water dashed on would do no harm. When you have established an intermission, give half a tea-spoonful of the vegetable cathartic powders, and if it does not operate in four or five hours, give as much more, and in two hours give an injection or two, to facilitate the operation. Three or four hours before the time for the chill, commence with the ague pills, giving a pill every half-hour for two hours, and then give one every twenty minutes until the time for the chill has past. On the approach of the chill, apply plasters to the ankles, wrists and left side, made in the following manner, viz: Take flour and make a thick paste, by mixing with it warm water; then spread it on cloths, prepared for the purpose, of domestic or some other thin cloth. For the ankles, have them four by five inches; for the wrists two by three, and for the side six by eight inches. After spreading the paste on the cloths, sprinkle over with equal parts of lobelia and cayenne. Then wet with No. 6 or third preparation of lobelia. Apply these plasters just before the time for the chill, and direct them to be kept on until the time for the chill has past. If the chill or ague should return, pursue the same course as in the first instance, and so on through each successive paroxysm. If these directions are faithfully pursued, there will not be a third paroxysm once in an hundred cases.

After the paroxysm is broken up, continue the pills two days as above; after which time, about four pills per day for two or three days longer, in order to prevent a relapse.

three days longer, in order to prevent a relapse.

See that digestion is well established, before you cease taking the pills or some good tonic medicine. The reason why so many relapse, after convalescing a while, is, that they quit the use of the tonics, before the digestion is well established. Some attention to diet is necessary. Let the food be of good nourishing quality and taken in moderate quantity.

As the appetite now is very craving, you must not rely upon it; but call your judgement into requisition. Let me here remark, that from observation and experience, I am convinced of one prevailing error, in regard to diet; and although it is almost universally popular, I venture to oppose it; that is, that patients convalescing or recovering, should eat often, say five or six times a day, and but little at a time.

This practice is one of the most fruitful sources of indigestion, perhaps second only to that of administering poisonous drugs as medicines. Be it remembered that whenever the stomach is excited with the presence of food, that the gastric juice or solvent fluids

are poured into the stomach, for the purpose of decomposing, digesting, and assimilating, &c., and the organs which yield this juice, are exhausted by so frequently exercising; and the digestive resources are exhausted, the stomach itself being left to contract, by not being properly distended at any time with food. The consequence is an exhaustion of secretions and the very prevalent form of disease of the present age—dyspepsia.

PATHOLOGY OF INTERMITTENTS.—There are three distinct stages of this disease. First, cold stage. The disordered functions of the brain in this stage, depend, I imagine, principally upon the gorged state of the lungs, and also upon the overloaded state of the right side of the heart, preventing the free return of blood from the head. The disordered functions of the brain may also be produced by a change in the balance of the circulation of the vessels of the head, independently of the state of the lungs and heart. The tremors may probably be attributed to congestion of the vessels of the brain and spinal marrow. The sense of cold seems to be owing partly to the state of the nervous system, and partly to the state of the lungs. The pain in the head and the loins, and oppression of the præcordia, may fairly be attributed to the same causes. The muscular prostration and feeling of sinking, are not owing to actual debility, but to obstructed action, in consequence of the above mentioned condition of organs. The first circumstance, which we distinctly perceive, is diminished circulation of blood in the extremities, then a sense of coldness, and with it a feeling of weakness. These are evidences of an irregular determination of blood, by whatever cause produced, and in proportion as blood accumulates in the vessels of internal organs, their functions become impeded. (This state is termed congestion, which implies that the balance between the arterial and venous system is deranged for the time, the latter being overloaded or congested with blood, and not that the circulation in any organ or set of organs is entirely obstructed, which nevertheless does actually happen in those extreme cases in which reaction does not take place, and the individuals die in the cold stage.)

Hor Stage.—Acting upon the principle of not inquiring into

occult causes, very little need be said respecting the circumstances which produce reaction; but there has long existed a pretty general belief, that the blood accumulates about the heart in the cold stage, proves a stimulus to that organ and produces reaction. In this manner, Dr. Gregory and others make the spasm of the extreme vessels the cause of the diminution of blood on the surface, and then he observes: "The blood thus driven upon the internal parts, must accumulate in, and prove a stimulus to the heart and great vessels:" The next question comes to be, how is this effected? The truth is we know nothing of the matter; and after all, it is best to attribute it to the "principles of life," or in the language of Cullen, to the "vis medicatrix nature," which is ever in action, to prevent injury and to remedy the evil after it has occurred. The phenomena which are ascribed to the state of reaction, are those, the combination of which, is denominated fever, namely, hot and dry skin, quick pulse, thirst and loss of appetite, restlessness and anxiety, headache and occasional delirium, hurried respiration, dry furred tongue, &c.

The heat and dryness of the skin, in this stage, are no doubt owing partly to the suppressions of the secretions and excretions; also probably to some change in the nervous system, but principally to the increased quantity of blood driven to the surface of the body.

Sweating Stage.—An interesting question here presents itself. How does the perspiration produce the effect? It appears to me that it acts in two ways; first, cooling the body by evaporation, and, secondly, it moderates the force and frequency of the heart's action, by depleting the system. It is impossible to state the precise quantity of fluid perspired in such cases; but, if I can trust the hasty and far from accurate observations made respecting this point, by placing oil skin on the outside of the bed clothes, I am inclined to believe that it amounts to considerably more than two pounds; and it must be kept in view, that this discharge comes directly from the blood itself. (The pathology of intermittent fever has ever been a vexed question in medicine, nor shall we attempt to solve it; at the same time we propose to give a brief view of those modern doctrines, which, originating with the

French pathologists, have been more or less adopted wherever medicine is cultivated.)

The best maxim in physic is to get rid of diseased action as quickly as possible; there is no saying what mischiefs may follow in the train of consequences. There could not be a moment's hesitation, says Dr. Fordyce, in determining to restore the patient to perfect health at once, were there any remedy or mode of treatment, that would certainly prevent returns of paroxysms of a tertian intermittent, and take off symptoms remaining after the crisis, so that no other disease should follow. But there most undoubtedly is no medicine uniformly efficacious, or that always leaves the patient in tolerable health, and secure of not being destroyed by the remains of the disease, or by any other disorder arising in consequence of it."—A. C. Logan.—B. M. Recorder, vol. 4, p. 385.

Symptoms.—This disease may be divided into three stages, viz:

1. The cold stage.

2. The hot stage.

3. The sweating stage.

Cold Stage.—An intermitting fever generally begins with pain of the head and loins, weariness of the limbs, coldness of the extremities, stretching, yawning, with sometimes great sickness and vomiting; to which succeed slivering, and violent shaking; respiration is short, frequent and anxious.

Hor Stage.—After a longer or shorter continuance of shivering, the heat of the body gradually returns; irregularly at first, and by transient flushes; soon, however, succeeded by a steady, dry and burning heat, considerably augmenting above the natural standard. The skin, which before was pale and constricted, becomes now swolen, tense and red, and is remarkably sensible to the touch. The sensibility, diminished in the cold stages, is now preternaturally acute; pains attack the head, and flying pains are felt over various parts of the body. The pulse is quick, strong, and hard; the tongue white; the thirst is great, and the urine is high colored.

SWEATING STAGE.—A moisture is at length observed to break out upon the face and neck, which soon becomes universal and uniform. The heat falls to the ordinary standard; the pulse diminishes in frequency and becomes full and free; the urine deposites a sediment; the bowels are no longer confined, respiration is free

and full; all the functions are restored to their natural order; when, after a specific interval, the paroxysm returns, and performs the same successional evolution, generally once in twenty-four hours. Sometimes in this fever there is more or less delirium.—Beach's Fam. Phys. 7th ed. p. 227.—Mattson, page 448.

Ague and Fever.—The cold stage of this disease is preceded for a longer or shorter time by various symptoms of ill health, such as lassitude, yawning, cold hands and feet, indigestion, restlessness, pains in the back and limbs, and a peevish or irritable temper. The blood recedes from the surface, and leaves the skin pale, shrivelled, rough, and benumbed, and in some instances the body trembles or shakes so violently as to resemble convulsions. The breathing is short and laborious, accompanied by a feeling of tightness or oppression in the chest. The patient may continue in this state for a few minutes or for several hours; and as the chill goes off, the fever succeeds, accompanied with thirst, nausea, vomiting, a full and strong pulse, headache, and pains in the back and joints. This is termed the hot stage. At length perspiration ensues, which terminates the paroxysm. The mouth becomes moist, the heat of the skin abates, the respiration grows easy and the pains in different parts of the body subside.

The chills may return daily, every other day, or every third day, according to the peculiar type of disease; but their recurrence usually takes place every second day. During the intervals, patients sometimes enjoy a tolerable share of health, but at others they complain of languor, indigestion, loss of appetite and a sensation of chilliness.

Ague and fever is peculiar to marshy districts, and is the most prevalent when the days are warm, and the evenings and mornings damp and chilly. Those who disregard the laws of health, eating and drinking promiscuously whatever the appetite may crave, or the fancy dictate, or who indulge in excesses of any description, which weaken the body or disorder the digestive functions, are generally the victims of its attacks."—Mattson's American Vegetable Practice, 2d ed. page 448.

Signs which distinguish  $\Lambda_{\text{GUE}}$  and Fever from Hectic Fever.

I. In hectic fever there is an absence of the distress in the back and limbs, which attends a paroxysm of intermittent fever.

II. Hectic fever occurs at irregular periods, whereas in intermitting fever the paroxysms come on at regular periods, seldom varying more than an hour earlier or later than the preceding paroxysm.

III. In hectic fever the hot stage is attended with a circumscribed flush on one or both cheeks; without pain in the head,

which is a most distressing symptom in ague.

IV. The pulse in hectic fever instead of being moderated by the subsidence of the paroxysm remains quick.

V. The tongue which is furred in ague is clean and smooth

in hectic.

VI. In hectic fever the urine is muddy during the paroxysm and clear after. In ague it is muddy or turbid after a paroxysm.

VII. The mind is full of hope and confidence in hectic, and desponding in intermittent fever.

Intermitting fever very seldom proves fatal except where it occurs in broken-down constitutions, or when complicated with extensive derangement of some important organ. In low marshy districts of country the disease is apt to become chronic, from the continued exposure to the cause; the countenance is sallow, the abdoman distended, and the spirits sunken and dejected.

FAVORABLE SIGNS.—Each succeeding poroxysm occurring at a later period, scabby eruptions about the mouth and nostrils, cleaning of the tongue and restoration of the natural secretions of the skin and mucous membranes, and an improvement in the appetite, indicate a favorable termination of the disease.

It frequently happens that an unusually severe paroxysm, without there being any assignable cause, terminates the disease, the

patient becoming convalescent.

Intermitting fever has its seat in the stomach and bowels, and subsequently other organs become affected, more especially the liver. An inactive or torpid condition of the liver is doubtless a frequent cause of the disease becoming chronic. In such cases the skin and whites of the eyes become sallow, the abdomen swollen, and the spirits sunken and dejected, and the disease proves difficult of cure.

TREATMENT.—The indications of treatment are to cleanse the stomach and bowels, together with other means for aiding nature in her efforts to remove obstructions, establish a natural action throughout the system, sustain the nervous energy and restore digestion.

Thomson's course of medicine by its prompt action upon the stomach, bowels, and skin, and by the fresh impulse given to the circulation and the secretions, will prove the most effectual method of curing intermitting and all other varieties of fever. A very effectual plan is to commence with a course of medicine an hour or two before the time at which the chill comes on. In ordinary cases where the paroxysms occur every other day, the course of medicine will seldom require to be repeated more than two or three times to effect a cure, provided a proper intermediate course of treatment be pursued.

TREATMENT DURING THE PAROXYSM.—1st. Of the cold stage. During the chill the patient should drink hot teas, as composition, cayenne, or pennyroyal, and be placed in a vapor bath, or be covered warm in bed, and hot bricks or jugs of hot water placed at the feet and back, and third preparation of lobelia, tincture of capsicum, or some stimulating liniment rubbed along the spine. This will assist to bring on reaction and overcome the chill. Where the vital powers are in an exhausted condition and insufficient to establish reaction, constituting what is termed congestive intermittent, an emetic of the third preparation of lobelia should be given to relieve the stomach of its foul contents and to arouse its sunken energies; and external warmth be applied around the patient. After free vomiting, the system will generally react, but if it should not the medicine must be continued, and the same administered by injection to the bowels, together with mustard plasters to the stomach, wrists and ankles. In some rare cases fatal congestion has taken place during the cold stage, for want of power in the system to produce reaction. The most effectual means for bringing on reaction and of relieving internal congestion are the application of the vapor bath and the free use of the third preparation of lobelia.

TREATMENT DURING THE HOT STAGE.—When the fever comes

on all dry heat may be removed from around the patient, but the hot medicine will be proper with a view to aid the reaction to bring on a crisis by perspiration. Where the fever is of a violent character and the patient greatly distressed, an emetic should be given, and the patient kept relaxed by broken doses of lobelia, given either alone or in the stimulating teas, and bathe the surface with whisky, vinegar, salæratus water, or simple water. Where the thirst is urgent, the patient craving cold drinks, they may be allowed him in small quantities. A draught of cold water will in some instances cause perspiration in the latter period of the hot stage. Acidulated drinks, as lemonade, are very grateful to patients, and may be taken in moderate quantities. The thirst, however, arising from suspended secretion of the mucous membrane of the mouth and throat, will be more effectually relieved by capsicum tea, than by cold drinks. Simple herb teas, as mint, ditany, pennyroyal and balm, are proper in any stage of the disease. Bathing the surface with spirits or vinegar when the fever is violent affords relief to the patient. Hot bricks wrapped in cloths wet with vinegar, will in some instances afford relief even during the fever.

When the sweating stage comes on, all cold drinks are inadmissible. The patient should keep in bed and take hot medicine to favor and continue the perspiration. When the pespiration ceases the body and limbs should be bathed with Thomson's No. 6, and dry, warm clothing put on. Much benefit may be derived by the use of the vapor bath at this period.

TREATMENT DURING THE INTERMISSION.—The treatment during the interval between the paroxysms, is to be regulated according to the circumstances of the case and the condition of the patient. Thus in the first stage of the disease pure stimulants, as cayenne and composition, should be used with a view of sustaining the strength and aid in restoring the secretions. The compound lobelia pills answer the place of the teas, two or three of which may be taken every hour or two.

INDICATIONS FOR THE USE OF TONICS.—When there is a complete intermission of fever between the paroxysms, and the tongue

begins to clean, and assume a more natural appearance, tonics will come in play.

Peruvian Bark.—This is probably the most effectual tonic in intermitting fever, and given at a proper time, or under certain conditions of the system, no bad consequences probably would ever arise from its use, even in large doses.

The advocates of Homeopathy, in proof of their theory, assert that Peruvian bark continued to be taken by a person in health, will produce a disease resembling intermittent fever. In certain conditions of the stomach, for instance where there is a reduncy of acid or the secretions otherwise deranged, Peruvian bark, or other astringents, as hemlock, and marsh rosemary, may produce a sense of oppression and constriction at the stomach, and even occasion intermitting fever. Peruvian bark, however, will not disorder a healthy stomach, nor will it produce intermitting fever, except under peculiar circumstances.

In preparing Peruvian bark I usually combine with it a portion of Virginia snake root and orange peel, or with spice bitters, and give in the form of a decoction. It may also be prepared in tincture, or taken in good wine, as Madeira or Sherry. Barks are also frequently taken in substance mixed with some kind of liquid, such as milk, coffee, cinnamon water, clove tea, cider, brandy and water, or simple water. The barks may be taken in teaspoonful doses, and these repeated several times a day when there is absence of fever; or take from half to an ounce of the bark an hour or two previously to the time at which the chill is expected. When there is much acidity of the stomach a portion of salæratus or sup. carb. soda should be combined with the barks. This as well as other tonics may be administered by injection with the same benefit as when swallowed, provided the injection be retained.

QUININE PILLS.—Pills composed of equal parts of quinine and capsicum, form a substitute for barks and all other tonics; and on account of the facility with which the pills are taken, they are generally preferred to any other preparation. Quinine contains the active principle of the Peruvian bark. I cannot discover any objection to its use in a proper state of the stomach. A few

hours before the period at which the chill comes on, the quinine or whatever tonic is used, should be given freely; when the patient is taking quinine, it will be proper to omit the use of bayberry and all other vegetable astringents.

A great variety of tonics have been employed for ague, which answer in many cases equally as well probably as the Peruvian bark and its preparations, such as Thomson's No. 4 bitters, various species of the poplar and willow, the broad-leaved dogwood bark, wild cherry bark, columbo, gentian, quassia, Virginia snake root and thoroughwort or boneset.

Before resorting to the use of tonics attention must be paid, as before mentioned, to the condition of the stomach, and not employ them whilst the tongue is dry and exhibits no tendency to clean at the edges. Neither should they be used so long as there is a feverish condition during the interval between the paroxysm.

Relapses are liable to occur if the patient be exposed to the exciting cause.

Precautions.—Avoid cold and dampness; dress warmly, and never go out in the morning or evening with an empty stomach. If the patient resides in a marshy district he should continue the use of tonics in order to invigorate the system. The cold shower bath may also be used as a preventive, where there is no particular organic disease, as an enlargement of the spleen or liver.

The plan adopted by some practitioners and which generally proves successful in preventing a relapse, is to give the patient for instance half an ounce of Peruvian bark or eight or ten quinine pills, about the seventh day after the last chill, and then at the end of the next seven days give a less quantity, and in this way continue giving the tonic, every seventh day lessening the quantity each time.

If there are symptoms indicating a return of the disease the patient should go to bed, cover warm and take freely of composition or capsicum tea, or what is better, go through a course of medicine.—Comfort's Thomsonian Practice, p. 19.

Howard, page 402.—"The proprietor and author of this medical work, on a journey to Cincinnati, was taken with a chill succeeded by a fever, which affected his head so much that his mental

faculties were entirely deranged. His wife and two Botanic physicians being in company, and business of importance urging them forward, they, in two hours, took him through a course of steaming, injections, emetic, and washing off in cold water, &c., which entirely relieved him from the fever and mental derangement; and after taking refreshment, they placed a bed in the carriage and traveled that day, in all forty miles. The next day he felt comfortable and traveled thirty miles; the day after laid by and had a chill and heavy fever; on the next day traveled thirty miles comfortably; but the day after had a violent fever and took a thorough course of medicine, which threw off the disorder entirely; and he came home well.

In a few days after, when riding out, he was overtaken by rain, got wet, and being out in the evening, took a relapse, which was followed by a fever, that required six full Botanic courses to remove. Two weeks after this, through much exposure and great fatigue in the heat of summer, a second relapse occurred, and was succeeded by a fever of great violence and more dangerous character than the former one. It then took nine thorough Botanic courses, each of which would produce relief from all the disagreeable symptoms, using spiced bitters in the intervals; and so long as he continued in a profuse perspiration he felt comfortable, but so soon as his skin became dry he was afflicted with pains in his limbs and other parts of his body, with feverish symptoms, and could find no relief, until, by taking diaphoretic powders, or African or red pepper, and the application of hot stones to his sides, feet and other parts, free perspiration was again restored.

He continued in this situation several days, becoming weaker and could find no permanent relief, until by the use of warm stimulants and hot stones as aforesaid, a profuse perspiration was produced, and the pains mostly or entirely removed; then he was taken from the bed, and had a bucket of cold water poured instantly on his head, so as to run over his whole body, and wiping off quickly was again laid in bed greatly refreshed and strengthened; after which he enjoyed a longer exemption from pain than usual. Thus he was encouraged to repeat this course whenever the pains and aches returned, by which means he was soon restored to perfect health and strength."

## REMITTING OR BILIOUS FEVER.

## SECTION III.

Description.—Remitting fever is a form of disease in which the fever remits, but does not entirely subside before a second paroxysm comes on; or, in other words, one paroxysm follows another in such rapid succession, that the patient is never clear of fever.

CAUSES.—Similar to those described, as inducing intermitting fever; and indeed is but a different type of disease, owing perhaps to a different temperament or to a different state of the same temperament; as when the system is in a feeble and exhausted state and the attack of the disease violent; therefore I think it very reasonable that this form of disease should be most prevalent in the heat of summer and fall, when the system is much exhausted from heat and labor; also from the fact that it frequently changes to intermitting, and likewise to continued or inflammatory bilious fever.

Dr. Curtis says: "Fevers are either severe or light, frequent or postponed, from two causes. If a continued fever be light, it may be because there is much power and but little impediment to its action. In this case, the patient will recover without assistance, or more speedily or better with the aid of very simple means, as a little herb tea and a vapor bath. Or, it may be because there is little power and much obstruction. And this case requires very active remedies and careful nursing. In the former case, the patient will improve in general health, strength and spirits; in the latter, he will gradually decline in all these respects. In both cases the fever diminishes in force. In the former, because

there is less of obstruction to accumulate its force; in the latter, because there is less power to produce it. In both cases the indications are, to loosen the tissues obstructed, and to aid them by proper stimuli, in getting rid of their burden. When there is power enough in the system to keep up a continued warfare against the obstructions, and yet those obstructions are so located and confined, as not to be entirely removed, the disturbance of vital action being unbroken, the fevers will be what are called "continued." The powers of the system, however, being periodically exhausted by efforts at relief, the disturbance will be periodically reduced, though not entirely subdued, by circumstances, such as the change from night to day and day to night, forenoon to afternoon, evening to morning, &c., and these forms of fever are called remittent.

When the surface is not much obstructed, but only sympathizes with the disturbance within, it relaxes periodically, and the febrile accumulations, causes and results are partially dispersed by perspiration. The organs being exhausted by this effort, the reaction and its symptoms are postponed for a while, during which, in the early stages of the disease, the patient seems to suffer but little inconvenience. But there occurs in succession every day, two days or three, a season of lassitude, one of rigors or chills, one of fevers and one of perspiration, which last again removes the unpleasant symptoms."

Symptoms.—The symptoms of this form of disease are so various and complicated, that we shall not attempt to give them in detail; but a general outline of the more prominent ones, such as lassitude, a sense of anxiety, a pain in the head and back, also in the extremities, and a chill of greater or less duration, succeeded by fever. The pain in the head and back increases as the fever rises; the patient becomes very restless; great thirst, nausea and sometimes vomiting of bilious matter; and sometimes a glairy, white mucous without bile; the tongue thickly furred, generally white at first and afterwards of a yellowish hue.

The white of the eyes become yellow, the skin of yellowish mixture, or sickly appearance; a total disgust for food, a sense of tightness or stricture across the chest; the breathing difficult, the

pulse excited, rising to ninety or one hundred and generally ful but not very hard; the skin dry and hot.

These symptoms continue for twelve or eighteen hours and then abate; the skin becomes partially relaxed, and perspiration ensues, but it is but partial; the fever abates but does not go entirely off, and after a few hours returns with increased violence. In this form of fever the patient is worse every other day.

TREATMENT.—No time should be lost in instituting a thorough and persevering treatment. The first thing to be aimed at is a thorough intermission of fever. This is to be effected by giving two or three injections of sage tea, with half a tea-spoonful of lobelia seed (pulverized) in each half pint of the tea, at a time; repeat every twenty minutes, giving at the same time, half teacupful of the tea to drink, every fifteen minutes. If the head is very hot, bathe it with vinegar and water; also bathe the breast, and if the skin is very dry and hot, have it thoroughly sponged with warm water, and a hot brick wrapped in wet cloths, applied to the feet. And have some composition prepared. Take four tea-spoonfuls of brown lobelia, (I mean the pulverized seeds,) put them in a tea-cup filled with warm water and set by the fire to steep. After you have gone through with the injections and sponging, give a half tea cupful of composition tea, with a teaspoonful of the lobelia tea in it, sweetening with brown sugar, if preferred. Repeat the composition tea every fifteen minutes, adding from two to four tea-spoonfuls of the lobelia tea to each dose of the composition tea. Continue until your patient vomits three or four times, then cease giving the lobelia, but continue the sage tea or some other mild bland tea, as pennyroyal, horsemint, thyme, balm and the like. If the fever does not abate, after some two or three hours give a thorough steaming, if convenient; if you cannot, have the patient washed well all over with warm water and soap, until the skin is thoroughly cleansed; then dress the patient with clean linen. (I mean shirt and drawers, if in the habit of wearing them.) I would here remark, that there cannot be too much attention given to cleanliness in this form of disease. Never suffer your patient to remain more than three days without

changing his or her clothes and sheets; indeed if they were

changed daily it would be the better plan.

But to return to the patient: have him put to bed, immediately after bathing, with a hot brick, wrapped in wet cloths, to his feet. Now give him a half tea-cupful of composition tea and let him rest quietly for two or three hours. If the skin remains soft, give a brisk cathartic of the Vegetable cathartic powders or pills.

I will here remark and wish to impress it upon your mind, never to give a cathartic of any kind, in this form of disease, when the skin is dry and hot; indeed it should never be done, particularly in this form of disease, where there is a constant tendency to congestion. See then that the lower portion of the bowels and stomach are properly evacuated, and the outlets generally are opened before you attempt to force out the morbid contents of the middle portion of the intestinal canal. I have known fatal mischief done by giving cathartic medicine in this form of disease, when the outlets are generally closed, and the stomach and upper portion of the bowels are excited and irritated, while the middle and lower portions are torpid. When the stomach and upper portions of the bowels are excited, there is a determination towards the stomach and upper portion of the intestinal canal, the obstructions in the middle and lower portions remaining permanent; and in proportion as the circulating fluids recede from the extremities and external surface and tend towards the centre of the system, so the fluid organs contract. Consequently the rigidity of the skin and the muscular tissues at the surface and extremities is increased, and the result is clearly congestion, proportionate to the concentration of the circulating fluids, and the permanence of the congestion proportionate to the rigidity of the muscular tissues. No wonder, then, that those practitioners who rely upon cathartics to cure, should have bad cases of congestion, neither is it strange that their mode of treatment should prove fatal: since they destroy the reactive and revulsive powers of the system, in their attempts to remove congestion by drawing off the vital fluid of the patient. But if they should succeed in relaxing the muscular tissues by blood-letting, then they have so far exhausted the fountain of life, that its resources fail entirely before the internal obstructions are removed, and thus the patient sinks and dies under the operation and the cathartic first administered. This is intended as a plain hint to practitioners, and I hope it will not be forgotten.

But to return to the case as we left it above. If the powders or pills do not operate in four or five hours you will aid them by giving injections. In case the fever returns before the medicine operates, you must keep up the excitement on the bowels by injections, composed of composition tea, pulverized elm, and a small portion of lobelia. If the head be hot, bathe it with cold water and vinegar, also the chest, and if the skin becomes very dry and hot, sponge it with tepid water or weak ley; warm water with a small portion of salæratus in it is better. Be careful to keep the feet warm, and if the fever does not abate in a reasonable time, vomit him thoroughly as directed in the first part of the treatment; and so soon as you get the skin moist, apply the vapor bath for twenty minutes and longer if necessary, then wash off with warm soap suds and put the patient to bed again, with a hot brick, wrapped in wet cloths, to his feet. Remember, that you are never to apply dry heat, when there is present fever, but warm moisture; the object being to relax the skin, while you invite the circulation to the extremities, and thus prevent congestion of the circulating fluids upon the larger portion of the circulatory apparatus, thereby bringing about a complete balance of circulation and obtaining a perfect equilibrium in the system—in other words, an entire cessation of fever. When this is accom-

plished you must maintain it by pure tonics, stimulants, and food.

In the absence of fever, quinine and No. 6 come in play.

They may be used freely, or if the patient prefer the ague pills, give one every two hours. If the fever returns, treat the patient as above, and so throughout the whole course of the disease, and you may rely upon it you will succeed.

In as much as this is the prevaling form of disease, in all parts of the civilized world, and therefore must be very interesting to the practitioner of medicine; in order that he may have as much information on this subject as the limits of this chapter will admit, I introduce here the following extracts:

"Between the simple autumnal remittent and intermittent fevers, there exists no essential or radical difference. They are produced by the same cause, and differ from each other only in the grade of violence and duration of the paroxysms. As remittents, however, assume a peculiar character, in relation both to their general phenomena and their course, and demand a treatment correspondingly modified, they are properly made a subject of distinct consideration, although some writers, following a different course, treat of them under the same general head.

SYMPTOMS.—The symptoms which occur in the forming stage of remittents, do not differ from those which usher in the intermittent paroxysms. Languor, drowsiness, a sense of anxiety, aching pains in the back, head and extremities, are the prominent symptoms of its initial stage. Slight chills are, however, often among the very first manifestations of indisposition; at first they alternate, with flushes of heat, which latter gradually increase in duration until they predominate wholly, and the febrile reaction is fully developed. When the fever is once completely established, the pains in the head, back, and lower extremities, become greatly aggravated. These pains, especially those seated in the back and legs, are sometime so severe, as to resemble in violence, those which occur in acute rheumatism. The eyes soon acquire an icterode or yellowish tinge; the tongue becomes covered with a brownish fur; nausea, and occasionally bilious vomiting occur; a sense of fulness and weight or tension is felt in the right hypochondrium and epigastric regions; respiration is more or less oppressed and anxious; the urine is scanty and deeply tinged with bile; the pulse is full, frequent, but seldom very hard or tense, and the skin is generally dry and hot. These symptoms continue until the succeeding morning, when a gentle perspiration appears on the superior portions of the body and sometimes over the whole surface. The febrile excitement now abates, frequently, very considerably; but not so as to amount to a perfect intermission, the skin still remaining preternaturally warm, and the pulse irritated. This remission continues but a short time, not more, commonly, than from one to two hours. The febrile excitement rises again with more or less celerity, until it requires its former violence, or,

perhaps, exceeds it; which, after a certain period, again abates, and gives place to another remission. In this way the fever proceeds, undergoing regular revolutions of exacerbations and remission, until it either finally terminates in a perfect crisis and convalescence, or assumes a more uniform or continued course. This description answers for the simple and usual form of the disease, as it occurs in the autumnal months of the temperate latitudes; or, for the milder remittents of the warmer climates. There is, however, no form of fever which is subject to so great a diversity, in relation to its grade of violence, as the present one. In the inter-tropical regions, it usually assumes the most fatal and violent character; and at almost every place where it is endemical, it is attended with circumstances which give it a somewhat peculiar character. It is, indeed, impossible to give any description of this disease, which can have more than a very general application. We must content ourselves with a delineation of the prominent and characteristic outlines of its physiognomy, (if I may be allowed the expression,) and with a detail of those phenomena and circumstances, which may be deemed essential, and which have a particular bearing upon its remediate management.

The ordinary mild remittents of this climate, generally assume the double tertian or quotidian type; but the former type is by far the most common; for, although the exacerbations occur once every day, yet, we almost always find a very manifest aggravation of all the symptoms on the odd or alternate days. The exacerbations of a remittent of the quotidian type generally occurs several hours earlier than those of the double tertian type—the former happening usually about nine or ten o'clock, and the latter not till towards noon, or an hour or two later.

The remissions which so generally occur in the violence of the symptoms of this form of miasmal disease, are not, however, always so considerable as to be readily perceived, either by the patient or the physician; and, in some instances of an aggravated character, they may be, for a time, altogether inconspicuous or absent. It must be observed, moreover, that they do not invariably occur in the morning or forenoon; on the contrary, in-

stances are met with where the remissions take place in the evening or at some period during the night.

Remittents, although mild and regular in their commencement, are apt to assume an aggravated and dangerous character, if they continue unchecked beyond the ninth day, or second week. When this happens, the tongue becomes more and more loaded with a brown fur, and dry along the middle; delirium occurs more frequently and strongly; the skin acquires a deeper tinge of yellow, and a greater intensity of heat during the exacerbation; debility becomes more and more conspicuous, and the bowels distended with wind, and tender to external pressure; and finally, in many cases, watery and offensive discharge from the bowels, retention of urine, continued vigilance, restlessness, and almost constant delirium.

In the marshy districts of hot climates, remittents rarely occur in the mild and simple form which they are wont to assume in the temperate latitudes. They generally acquire a highly aggravated and dangerous character; and under circumstances particularly favorable to their occurrence, they are apt to assume a high degree of malignity from their very commencement. Remittents of this violent grade generally make their attack suddenly, and with great impetuosity. The cold stage is short and not often very severe. The febrile heat soon predominates and rises rapidly to a state of great intensity, and is attended with tormenting thirst, violent headache, excrutiating pains in the loins and the inferior extremities, great anxiety of feeling and difficulty of breathing, with nausea, and a distressing sense of weight and fulness in the stomach. These symptoms continue for about twenty-four hours, when a remission, always very considerable, and frequently amounting almost to a perfect intermission, takes place. This calm, however, is but transient. A second paroxysm soon ensues, more violent and alarming than the first. The eyes now become yellow, watery, and red; the oppression and anxiety in the epigastrium is extremely distressing, and a deadly sickness, with constant vomiting or retching, torments the patient.

After the lapse of some time, these violent symptoms again abate, and a clammy perspiration appears on the surface of the body.

During the first two paroxysms, the bowels are, generally, torpid. In this way the paroxysms continue to recur, until either a salutary crisis or death takes place, one or the other of which not unfrequently happens in the third paroxysm. If the disease runs on beyond the fifth or sixth paroxysm, very great prostration ensues; the remissions become less distinct; delirium almost constantly attends; and the skin acquires either a peculiar stinging heat, or becomes cool and cadaverous to the touch. The pulse, in cases of this kind, frequently differs but little from its natural state; more commonly, however, it becomes quick, irregular and frequent. In this aggravated and protracted state of the disease, various other symptoms usually occur, in addition to those already mentioned, indicative of the fatal malignity of the malady. The lips become swollen, and of a livid or purple hue; the tongue dark brown, or black, fœtid and clammy; the eyes red and watery, or quite dry; the urine dark brown, offensive, or entirely suppressed; the alvine discharges reddish and watery, or black, bloody or colliquative, attended generally with a tympanitic state of the abdomen; and petechia and hemorrhages occasionally occur in the last stage of the disease.

In general, the violence of the disease will be in proportion to the suddenness and vehemence of the incursion. When the attack approaches gradually with the ordinary premonitory symptoms mentioned above, the disease usually runs its course slowly. When, on the contrary, the invasion is sudden and violent, we may expect the disease to be rapid and violent in its progress. The first paroxysm only is usually ushered in by a very distinct cold stage, the succeeding exacerbations being rarely preceded by a sense of chilliness.

Between the mildest variety of the disease, and the rapid, vehement, and fatal variety just described, this form of fever appears under the greatest diversity of grades and general character. Remitting, like all other forms of general fever, is liable to become complicated, either at an early or late period of its course, with local inflammations; and these secondary local affections constitute the chief and most important cause of those remarkable diversities which are known to occur in this disease, in different

localities, or at the same places in different seasons. From some inexplicable circumstance, connected, apparently, with the peculiar concentration, of character of miasmata, we find that in certain localities and seasons the disease manifests a peculiar tendency to fall, with especial violence, on some one organ or structure, as the brain, the liver, the alimentary canal, or the blood vessels, and to assume, in consequence, a peculiar character in relation to its general phenomena and degree of fatality.

In general, however, two important organs—the liver and the alimentary canal, are the parts most apt to become prominently affected in fevers of this kind. In relation to these affections, two distinct modifications of the disease occur; one in which the phenomena of inflammation of the stomach and bowels, are especially prominent; and another modification, in which predominant derangement of the liver impresses its peculiar stamp or character on the disease. To the former, the term gastric, and to the latter that of hepatic, might, not inaptly be applied.

The remittents of the former variety, namely, gastric remittents, are characterized by the following phenomena, viz: redundancy of vitiated bile in the stomach and bowels; a bitter taste; a thick yellowish layer of mucous on the tongue, becoming dry, cracked, and of a dark brown or black color in the progress of the disease; total loss of appetite, and sometimes extreme disgust for every kind of food; a turbid, yellowish urine; great weight and anxiety in the præcordia; bowels tender on external pressure, and distended with wind, great pain in the loins and knees; intense pain in the forehead; very distinct remissions; a red or fiery edge and tip of the tongue; or after the brown and black crust scale off, a smooth shining, and red surface of the tongue; wattery and reddish stools, resembling the washings of flesh; retention of the urine; difficulty of swallowing liquids in the advanced stage; great craving for cool and acidulated drinks, &c.

Those remittents which manifest predominant hepatic disorder, that is, hepatic remittents, are characterized by intense febrile heat; violent pains in the head, and early delirium; fulness and tension in the right hypochondrium; with pain and pulsation in the epigastrium and right hypochondrium; a clean tongue, at first;

excessive irritability of the stomach; frequent and forcible vomiting, without the ejection of any bile, the matter brought up consisting of a glairy fluid, mixed with the drinks that may have been received into the stomach; great torpor of the bowels; a very yellow tinge of the skin and eye; and towards the determination of the disease, a copious discharge from the bowels of a dark or pitch-like matter. In this variety of the disease, the liver is manifestly inactive, and in a state of great sanguineous congestion. That this is the case, may be inferred from the absence of bile in the ejections from the stomach; the clean tongue; the sense of weight, fulness, and pulsation in the right hypochondrium; the great torpor of the bowels; the intensely yellow color of the skin; add the excessive and continued retching and vomitting. This latter symptom, namely, extreme irritability of the stomach, may be regarded as a strong manifestation of sanguineous engorgement and functional inactivity of the liver. We find this pathological fact exemplified in cholera, particularly in cholera infantum, in which disease there is seldom any bile whatever discharged during its early period; and the appearance of this secretion in the discharges may be hailed as a very favorable occurrence. Towards the conclusion of this variety of remittent fever, the liver frequently recovers its action and relieves itself by pouring a large quantity of black bile, or perhaps blood, into the bowels, as is manifested by the copious dark-colored or tarlike alvine discharges, which usually occur in such cases. These large and very peculiar discharges may, indeed, be regarded as the favorable crisis of such fevers; for convalescence generally soon follows their appearance; and except the disease be arrested by remediate treatment in the early period of its course, there are but few recoveries in which such discharges do not occur. Dr. Cartwright describes an epidemic fever, which prevailed in Monroe county, Mississippi, in the autumn of 1822, which was strikingly marked by the characteristic phenomena of this variety of fever. "The disease" says he, "was generally ushered in by a distinct chill, which was speedily followed by intense heat, thirst and headache, and very severe pains in the loins. The anxiety and difficulty of breathing, the deadly sickness, sense of weight,

heaviness, and pain in the stomach, increased as the fever approached its acme, until the suffering became intolerable. The exacerbations generally occurred in the evening, and a considerable remission, amounting in some cases to a perfect intermission, took place on the ensuing morning. On the evening of the second day a sudden and unexpected paroxysm, more violent than the first one, came on, which was attended with a most horrid sensation of pain and oppression of the stomach, accompanied with a deadly sickness and continued vomiting, but with the ejection of very little fluid of any kind. The bowels during the first and second paroxysms, were always in a state of obstinate constipation. About noon of the third day the third paroxysm generally came on. During this paroxysm the skin usually felt rather cooler than natural, and the pulse was commonly remarkably slow. By placing the hand on the abdomen, a pulsation was felt equal to that which the heart produces in the thorax, and synchronous with the pulsations of that organ." During the first two paroxysms the tongue was but little furred; but in the third it assumed a much worse appearance, having a dark red line running from its extremity over the back part, which soon changed to black color. The skin began to acquire a yellow color during the third paroxysm. The paroxysm continued to recur until the fifth, seventh or ninth day, when either death took place, or "enormous dark colored evacuations from the bowels occurred, and the patient commenced to convalesce."

Although the symptoms just mentioned clearly indicate very prominent disorder of the liver, it is equally evident, that in these cases, the mucous membrane of the stomach and bowels is always, perhaps, in a state of considerable irritation, and probably often of inflammation. Nevertheless, it can scarcely be doubted the peculiar phenomena of this variety of the disease, and which distinguish it from other modifications of remitting fever, depend mainly on certain morbid conditions of the biliary organs, and which do not occur to the same extent in other varieties of the disease. More or less derangement of the biliary system appears, indeed, to be a universal attendant on remitting fever. The tendency of miasmata to act upon and disorder the liver, has already

been particularly mentioned; and it may be presumed, from this circumstance, independent of the phenomena of the disease, that prominent functional disorder of the liver, constitute one of the most constant local affections of the remitting fever.

Before I leave this part of the present subject, it may be useful to advert again to the former or gastric modifications of this disease, and to direct the attention of the reader more particularly to the great tendency there exists in remittents, when they are prolonged in their course, to the occurrence of a high grade of irritation or sub-acute inflammation of the mucous membrane of the intestinal canal. In most cases of protracted remittents, even of the mildest kinds, the abdomen becomes tympanitic, and tender to external pressure; and the character of the stools, which are often found to resemble the washing of flesh, are a further evidence of such a condition of the bowels. In a practical point of view, it is of the utmost consequence to be aware of this circumstance; for in many instances this secondary inflammation is excited by the too frequent employment of irritating purgatives, and the disease greatly aggravated and protracted by such a course of treatment.

In localities where miasmata are copiously generated, or possess great virulency, remitting fever sometimes comes on under symptoms of cerebral disorder, similating apoplexy or mental derangement. In Italy, and the inter-tropical countries, the disease not unfrequently makes its attack under one or the other of these cerebral affections. Sudden and furious mania is sometimes among the first manifestations of the disease; and many patients sink, at once, into a state of insensibility and apoplectic oppression, from the vehement action of the miasmata on the brain. The brain, however, is not so apt to suffer inflammation in this form of fever, as in those which are the product of idio-miasmata, contagion, or atmospheric vicissitudes. This, at least, may be affirmed of the ordinary remittents of the middle latitudes; and it is probably generally correct in reference to all malarious fevers. Nevertheless, when the mucous membrane of the alimentary canal becomes inflamed, the brain usually manifests strong sympathetic irritation, by more or less violent delirium of nearly uninterrupted continuance. It is perhaps on this account, namely, the comparative unfrequency of cerebral inflammation in remittents, that we do not so often observe that sudden and remarkable collapse of the vital energies in this disease, as in the fevers produced by other causes.

The ordinary remittents of the temperate latitudes often terminate in intermitting fever before the final disappearance of the disease; and it is not uncommon for the milder varieties of the disease to assume the intermittent form at an early period of their course. This conversion of form appears to be particularly favored by blood-letting practiced during the first few days of the fever. Remittents, also, frequently terminate in other affections; such as neuralgia, chorea, paralysis, mental weakness, organic disorder of the liver and spleen, dropsy, pain and swelling of the large joints, &c.

Causes.—After what has been already said under the heads of koino-miasmata and intermitting fever, in relation to this subject, it will be sufficient to observe, that besides koino-miasmata, which are unquestionably the sole epidemic source of this form of fever, there are a variety of other causes capable of producing this malady. Worms and other irritating substances lodged in the bowels, may give rise to a regularly remitting form of fever. The disease known under the term of "infantile remittent," appears to arise from intestinal irritation. In the remitting fevers produced by causes of this kind, however, the biliary organs are much less apt to become implicated than they almost invariably are in the miasmatic remittents. Whatever may be the remote cause of remitting fever, however, it seems very evident that the principal morbid irritation is always located in the abdominal organs, and more especially in the liver and mucous membrane of the alimentary canal. So unequivocal and universal is this gastric disorder or irritation, that some eminent physicians have, in consequence of it, designated the disease by the name of gastric fever.

Indeed, this term appears to be preferable to that of remittent, which has no reference to the pathological condition of the system, and might, with equal propriety, be applied to hectic fever, which, though very distinct from remitting fever, has remissions and exacerbations almost as conspicuous and regular as that disease."

—Worthy's Prac., p. 73.

TREATMENT OF BILIOUS REMITTING FEVER.—A prompt and persevering course of treatment should be instituted in the early stage of the disease, with a view to cut short its course, and thus prevent the disease extending to other organs than those primarily affected.

Thomson's course of medicine constitutes the most effectual means not only for hastening the crisis, but for relieving the symptoms. The course of medicine should be repeated daily in the first stage of the complaint, or at longer or shorter intervals as the case appears to require. Where there is violent pain in the head with a high fever, it will be proper to commence the course by an enema, containing a portion of lobelia. One or two teaspoonsful of lobelia powder administered in this way, in luke-warm water, and retained fifteen or twenty minutes, will not only relax the system, but in most instances will answer the place of an emetic given in the usual way. This method of producing relaxation is very effectual, and is of the first importance in the treatment of acute disease when the arterial system is struggling hard to overcome obstructions to the circulation of the blood, and it also tends to equalize the nervous influence, and aids in restoring the secretions. Whenever the system is relaxed by lobelia, and the patient becomes restless, or complains of the external heat, and the breathing oppressed, the face, breast and hands, should be bathed with vinegar and water, spirits, or camphor and water; this affords great relief to the patient; the external covering should not be so great as to oppress or distress the patient. There are, however, no bad consequences to be apprehended from an emetic given in the usual way, even when there is a violent determination of blood to the head, the symptoms being in almost every instance relieved by the vomiting.

During the intervals between the courses of medicine, pure stimulants, as composition or capsicum tea, should be given occasionally, and frequent broken doses of lobelia, either in powder, infusion, tincture, or in pills.

When patients prefer taking medicine in the form of pills, the compound lobelia pills may be employed as a general medicine, more especially in the early stage of the disease, or until a crisis

takes place and tonics are demanded. The more fully the system is placed under the relaxing influence of lobelia, the greater will be the benefit; for as long as there is fever, there is more or less obstruction in the capillary vessels, and by placing the system under the influence of lobelia, it unlocks, as it were, the obstructed vessels, promotes perspiration and all the secretions, and equalizes the nervous power.

When the fever is very high, the face and breast, and even the whole surface may be bathed with cold water, vinegar and water, alcohol, brandy, camphor and water, or salæratus water. This is more especially adapted to the early period of the disease, or when the powers are sufficiently strong to bear these cold applications to the surface. Bathing the surface with whisky is perfectly safe, however, in any stage of the disease, and where the patient is greatly exhausted this will generally afford relief and apparently give strength to the system.

A great variety of teas and preparations for drink may be used in fevers, as pennyroyal, balm, mint, lemonade, apple tea, crust coffee, &c. A table-spoonful of cold water may be frequently taken where the thirst is urgent and the patient desires cold drinks.

Where the brain is much affected the feet should be kept warm and occasionally placed in warm water, containing mustard and salt, or hickory ashes. Injections are of special benefit under these circumstances in diverting the nervous influence and consequently the blood from the head to the bowels. Not only in this are the enemas beneficial, but they relieve the bowels and aid in restoring their lost function. I have occasionally observed discharges of black vitiated bile, evidently from the liver, by relaxation produced from an injection of lobelia; the obstruction in the liver is in this way overcome and the organ enabled to relieve itself from a state of congestion and oppression.

Further remarks in relation to the course of medicine.

1. Of Steaming.—When the patient is unable to sit up, or the system relaxed by lobelia injections, the vapor should be applied according to the directions given for steaming in bed; and during the operation, the surface may be sponged with simple cold water,

or combined with vinegar or spirits. I have had patients in a vapor bath on a couch or mattress from an hour to an hour and a half at a time, and without proving in the least degree debilitating, but in many instances, by proper attention, grateful and refreshing. In a case of recovery from one of the worst forms of fever, and when the patient had symptoms which are generally considered as denoting a fatal termination, the patient was steamed in this way every day for eight or nine days in succession, and with the most marked benefit. Where the heat of the surface is high it will be difficult to excite perspiration even by the vapor; without reducing the heat of the skin by bathing with whisky or vinegar. When the skin is in a relaxed condition, and the patient subject to profuse perspiration, the surface should be bathed with No. 6 after steaming. The shower bath is proper after steaming, provided the patient is able to sit up during the steaming. A sudden dash of cold water over a patient in fever has been observed to be followed by perspiration and an improvement in the disease.

2. Of the Emetic.—It is always proper to prepare the emetic in bayberry tea, and the stronger the decoction the more effectually will it cleanse the stomach. In the early period of the disease, when the fever is violent, and the tongue dry and parched, the lobelia powder should be steeped in the bayberry tea, adding the nerve powder or scullcap, and then strain, and half a tea-spoonful of capsicum added to each dose; or the patient may take the pepper seperately in tea. In the later period of the disease, when the strength is greatly exhausted, the third preparation of lobelia may be used, adding a portion of lobelia powder.

The following is a good form:

Two tea-spoonsful of the liquid of the third preparation;
One tea-spoonful of green or brown lobelia;
And a tea-cup half or two-thirds full of bayberry tea—to be sweetened and taken at once, and the same repeated two or three times, or as often as is found necessary.

I frequently give emetics without the application of the vapor bath; thus in low forms of fever, more especially if attended with delirium. I have repeated the emetic three or four times in

twenty-four hours without steaming, and continued this treatment for several days in succession, and with the most signal benefit. The propriety of administering the emetic frequently must be

judged of by the effect produced.

STIMULANTS.—There is no better stimulant in cases of fever than African pepper, mixed with Virginia snake root or ginger; it is less disagreeable to take, and not so apt to produce pain and distress in the stomach. The tea sweetened, to be taken in half tea-cupful doses every four hours, or a less quantity more frequently.

INJECTIONS.—These cannot be administered too often; it is advisable to give one both before and after the emetic. In very bad cases, attended with delirium, and a tympanitic state of the abdomen, I have found it necessary to use a table-spoonful, and even more, of the third preparation of lobelia in each injection, in order to produce a sensible impression upon the bowels.

THE SECOND STEAMING.—It is not in all cases necessary to administer the bath after the emetic; nor should the patient be disturbed so long as he is comfortable and in a perspiration; when this ceases, and the patient becomes uneasy, then it will be proper to give the bath. When the patient can sit up he should be showered with cold water, or washed with vinegar or spirits: if in bed, change the bed clothes and also the clothes of the patient.

After the course, a hot brick or bottle of hot water should be placed at the feet, wrapped in a damp cloth, and, if the patient can bear it, have one kept to the stomach. Care is necessary, however, not to oppress and distress the patient with external heat, more especially when there is fever.

When there is great tenderness of the abdomen, flannels wet with No. 6, or pepper sauce, should be applied, and also a hot brick to favor perspiration and a proper action in the skin. Hops stewed in vinegar and thickened with ginger, or a poultice composed of two parts of elm powder and one of composition, adding lard to prevent its drying, applied to the abdomen, will prove more beneficial than bathing.

As the tongue becomes moist and manifests a tendency to clean at the edge, the "canker medicine" should be used, in combination with stimulants and tonics. A tca-cup two thirds full of bayberry tea made very strong, adding a tca-spoonful of composition in powder, is one of the most effectual of remedies for scouring the morbid secrections from the coats of the stomach. This or some other form of bayberry or No. 3 should be given two or three times a day.

In all malignant forms of diseases termed fever, where there is a strong tendency to putrefaction, No. 3 or bayberry in strong decoction, adding the No. 6 or third preparation of lobelia, are probably the most effectual of all other remedies.

The pepper sauce has also obtained high repute as a medicine in malignant fevers, in consequence probably of its powerfully antiscptic qualities.

Tonics.—As the secretions become restored and the tongue cleansed, together with complete cessations of fever, the tonics recommended in the treatment of intermitting fever should be employed. It very frequently happens that remitting terminates in intermitting fever or ague. Badly treated cases of ague are also often converted into remitting fever.

A tea of the Virginia snake root is proper as a drink in any stage of the disease, and at the same time it tends to support the strength. A tea of the scull-cap or of the valerian may be used as a nervine, or the powder added to the other medicines.

DIET.—During the early stage of the disease, and until it assumes a favorable aspect, great attention to diet is necessary. When the stomach is unable to digest food, as is the case in the early period of remitting fever, nothing should be allowed the patient but crust coffee, barley water, elm gruel, &c. Many patients are injured by taking improper articles of food that the stomach cannot digest.

In a more advanced period of the disease, essence of beef, chicken water, and egg soup may be taken, provided they are found to set well on the stomach.

In a sinking state of the system, wine-whey and carbonate of ammonia, or essence of beef, is necessary to support the system in the way of nourishment.

Relapses of intermittent or remitting fever are much less liable to occur in summer than in autumn and winter. The best preventive probably is quinine, taken in eight or ten grain doses about every seventh day."—Comfort's Practice, p. 27.

Dr. Reed reports a case of fever of a violent and stubborn character, in which he gave five courses of medicine, three of them in immediate succession, which consumed fifteen hours; and the other two within sixty hours from the commencement. The third course removed the fever, and the two last effected a complete and permanent cure. He says he mentions this circumstance to encourage others to promptness and perseverence in all bad cases of fever.

Dr. Reed also says he has encountered fevers of every form, in patients of every age, and in different climates, having practiced in the Western and very extensively in the Southern States, and never lost a patient whose only disease was fever. We know that his practice has been very extensive as well as eminently successful, and therefore take leave, though apparently out of place, to introduce a few of his remarks on fever, which we think entitled to the highest consideration.

He observes, that in violent attacks of fevers, in the South, no time ought to be lost. In cases of this kind he gives a strong tea of the diaphoretic powders and ginseng, places a hot brick or stone at the feet, and administers a stimulating injection. If the patient appears bilious, always administer an emetic before using the vapor bath, or the bile will be scattered through the system, which he thinks injurious. Vomiting, he says, ought not to be discontinued when five or six motions are produced; ten or fifteen are not too many, and sometimes it may be advantageously carried to twice that number. In one case of bilious fever, says he, I continued the vomiting for eleven hours. In thirty-six hours the patient sat at the table and ate, and in forty-eight hours went on his journey.

I once, continues Dr. Reed, vomited a Mr. Piatt (brother to the late John H. Piatt, of Cincinnati,) all night, which completely broke up his fever, and effected a permanent cure. After a fever is checked, Dr. Reed thinks that pills made of cayenne and

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rhubarb are good to prevent a relapse. He directs two to be taken every hour until they move the bowels. Sponging the body with pepper tea, in bad cases of fever, he also highly recommends during the operation of vomiting; a pint of the tea to a gallon of cold water.—Howard, page 398, vol. ii., 3d ed.

"The principal and almost only remedies (if such they may be called) resorted to by physicians in this day, are mercury, salts, bleeding and blistering. I shall not consume time here to descant on the impropriety and injurious effects of such practice: this has been farther exemplified in other parts of this work. It is sufficient here to observe that, instead of such treatment proving beneficial, by aiding nature to overcome the disease, it counteracts her salutary efforts, and either destroys the patient, endangers his life, or protracts his complaint; and should his constitution be sufficiently vigorous to withstand the combined influence of these 'Herculean remedies,' or, in other words, should the patient recover in spite of them and the violence of the disease, the subsequent effects injure or ruin his health.

The practice is certainly absurd and irrational, and I ask, is it not preposterous in the extreme, and can it be supported by arguments, reason, experience or facts.

When a person is attacked with a fever, the whole sanguiferous system is stimulated or aroused to throw off or cast out the enemy, and she invariably points, as we before stated, to certain doors, outlets, or excretions of the system, as the only natural and proper passages through which such enemy must be driven from the system; and it is the province of the physician to aid her in this wise and well-established effort and intention; but when such means are made use of, instead of rendering her the necessary assistance, her powers and energies are entirely crushed, weakened or diminished; first, by bleeding; second, by administering a poisonous mineral—mercury,—and thereby corrupting the fluids, and inducing another dangerous disease, perhaps worse than the first. I am satisfied that mercury and bleeding in febrile, as well as other diseases, bring on a contaminated state of the blood, and dangerous, if not fatal, debility."—Beach's Family Physician, page 217, 7th ed.

## TYPHUS, CONGESTIVE, AND YELLOW FEVER.

## SECTION IV.

Designated by medical writers as different and distinct diseases, are but various modifications of a malignant disease, and consisting essentially in great prostration of the living powers or principle of life.

Intermitting, remitting, bilious, continued, congestive and typhus fevers, (as they are termed,) may arise from the same cause or combination of causes. They are also liable to run into each other as the cause of disease is more or less powerful, or as the vital powers become weaker or stronger. Thus an intermittent may, by bad treatment or other depressing influence, become a remittent, and if the liver should be prominently disordered, the disease will receive the name "bilious remittent." By a still further prostration of the vital powers, the disease may assume the congestive or typhus character. Then, if nature should gain ascendancy over the disease, the symptoms may reassume the remittent type, or the disease terminate in intermittent fever or ague.

In persons of depraved or drunken habits, the recuperative powers are depressed or impaired; consequently, under these circumstances, disease is liable to assume a malignant character.

Continued exposure to poisonous effluvia from the decomposition of certain vegetables, or to exhalations from the body of one affected with a malignant disease, as yellow or typhus fever, by degrees and in an insidious way, may poison the system and prostrate the vital powers so low as to destroy the power of generating heat and nervous influence, and the patient sinks into a

dangerous state of extreme debility and stupor, which would be called yellow or congestive fever.

In some instances, from the force of the cause of disease, the vital energies are suddenly overwhelmed, or the principle of life destroyed, the system being in a state of complete stupor and insensibility, as if stunned by a blow upon the head, or poisoned by a large dose of arsenic. Disease of such deadly character seldom occurs, however, in temperate latitudes, being confined principally to certain localities in hot climates. Not that a high temperature occasions the disease, but heat combined with moisture gives rise to malaria or the deleterious gases which poison the system. Typhus and congestive fever prevail mostly during winter, but it very rarely happens that patients die without some degree of reaction occurring, as sometimes happens in particular localities in hot climates.

The following case tends to illustrate the insidious and disguised manner in which disease of the most malignant character sometimes takes hold of the system: A young man of this city whose health had become impaired by a succession of colds, became subject to bleeding at the nose, which occurred at frequent intervals, during the term of some weeks. In this exhausted state he bailed some offensive water from a cellar that was very damp, and he remained in the cellar for some hours. Soon after this he grew worse, and I was desired to attend him. He was able to walk about the room, though extremely feeble and dull; he would converse, though with considerable hesitation; his skin was of the natural temperature or nearly so, but pale, relaxed, and without elasticity; his tongue was but very slightly coated, scarcely sufficient to change its natural appearance, and the pulse was apparently natural, manifesting no indications of irritation or unnatural excitement. This patient gradually sunk and died in about two weeks, though the most powerful stimulants were used with a view to arouse the energies of the stomach and bring on reaction. There was no sign of fever, except an occasional flush on the cheeks towards the termination of the disease, neither did he complain of pain; and the stomach appeared altogether insensible to the most active stimulants from the commencement. There

was a moisture on the skin during nearly the whole period of his illness. There was a peculiar expression of the countenance—a vacant stare, as though the chain of sympathies were broken up, and the brain not perceiving what was going on in the system. This peculiar expression of countenance, which might not be noticed by a common observer, together with what is termed the "sardonic laugh," are always alarming.

The sudden deaths sometimes occasioned by drinking cold water in very hot weather, and the system exhausted by hard labor or over exertion, Dr. Thomson says are owing to the loss of inward heat, occasioned by the cold water, and the outward heat being high there is a balance of power between the outward and inward heat, and that when this takes place the blood ceases to circulate. "The inward heat," says Dr. Thomson, "is the fountain of life, and as much as that has the power over the outward heat, so much we have of life and strength, and when we loose this power of heat our strength and faculties decay in proportion." The fatal diseases called "yellow and spotted fever," Thomson says, are caused by the loss of inward heat, or by a balance of power outward and inward.

This theory of Thomson would appear perfectly plain and consistent with the laws of life and motion, provided there be no distinction made between animal heat and the electro-galvanic or nervous fluid. They are evidently in inseparable connection, but it is usual, and doubtless proper, to make a distinction. Then the cause of sudden death under the circumstances above alluded to. may be owing to the immediate and total suspension of the power of generating nervous fluid, and as the circulation of the blood depends upon continued currents of nervous fluid passing from the centre to the surface, the moment it ceases to be generated the blood must cease to circulate. The direct tendency of all poisons is to suspend the functions of calorification and inervation. Thus a large dose of arsenic taken into the stomach immediately destroys the power in the system of producing heat and nervous energy, and death becomes more or less sudden in proportion to the quantity of poison taken. If the dose is large there will be no reaction, nor any trace of inflammation discernible in the stomach after death; the vital principle being suddenly destroyed, without the power of making an effort at reaction. But if the dose be not sufficient to destroy life under three or four days, there will be more or less reaction, and the stomach will take on inflammation. The inflammatory action is the struggle of nature against the effects of the poison. The term congestive or yellow fever would seem almost as applicable to such a case as to the cases of malignant disease, produced by poisonous agents in the air, and which sometimes destroy the vital principle almost as effectually as a large dose of narcotic poison.

It has been observed in frequent instances where patients have died suddenly from yellow fever, that no traces of inflammation were discoverable in the stomach by examination after death; precisely as in a case of sudden death from a powerful dose of arsenic, the principle of life being suddenly destroyed, without the occurrence of fever or inflammation.

The character of disease is as much modified probably by the condition of the system at the time the patient is exposed to the exciting cause, as by the power of the cause itself. Thus the same exposure to cold and dampness that would produce high inflammatory fever in one, would cause typhus fever in another; and the greater the loss of power in the stomach the more liable the system will be to malignant forms of disease. And likewise whatever organ is weakest will be the more liable to be especially diseased. Thus, in some, the brain becomes early affected, whilst in others the liver is prominently disordered, and in others again the disease will be chiefly concentrated in the stomach and bowels, which is probably in all cases the original seat of disease called fevers.

"I remember with pain," says Dr. Eberle, "the unfortunate lot of an amiable and intelligent friend. He was a man of healthy constitution, and fond of indulging in the pleasures of the table. He was seized with simple synochal fever from cold. His physician bled moderately; the fever went on unchecked; he bled again and again daily; after the seventh bleeding there was still too much quickness and tension in the pulse; the lancet was inserted the eighth time, and the patient sunk almost immediately into a

state of collapse. Stimulants, both external and internal, the most diffusive and potent, were now diligently applied, but all in vain; he lived but a few hours longer."

TYPHUS FEVER.—In the commencement of this form of disease there is usually much distress felt at the pit of the stomach, an entire disgust for food, giddiness or swimming of the head, extreme debility and dejection of spirits for some days before there is any fever. These are called the "premonitory symptoms;" they are, however, the direct and immediate consequences of the cause of disease, and are a more aggravated form of the same train of symptoms that occur in the commencement of ordinary "bilious" or "remittent fever."

The premonitory symptoms in typhus fever usually continue a week, and semetimes much longer, when the patient is taken with a chill or rigour, attended frequently with sickness at the stomach and vomiting, confusion in the head and extreme depression of mind. This chilly state continues an indefinite period, varying from six to twelve hours, when symptoms of slight reaction occur, constituting a low malignant grade of fever. In this stage the symptoms do not differ from those which prevail in the more aggravated form of remitting or continued fever. But the powers of the constitution give way and the patient sinks into a state of "collapse," when the following train of symptoms are presented, variously modified, however, in different cases:

Symptoms which characterize Typhus Fever.—Extreme muscular debility; a weak and frequent pulse; a stunned or stupified condition of the brain, frequently with low muttering delirium; the tengue coated with a brown or black fur or crust; twitching of the muscles of the face; great difficulty of protruding the tongue; "constant recumbrance on the back and sliding down towards the foot of the bed from deficient muscular power; difficulty of hearing, and insensibility to surrounding objects; a peculiar biting heat of the skin: hiccough;" a distended state of the abdomen, with tenderness to pressure; the urine pale, and foaming like beer when voided in a vessel; and as the disease advances there is a tendency to diarrhæa, the discharges being acrid and exceedingly offensive; the stupor increases, from which it is difficult for the

patient to be aroused. Typhus fever, as it is termed, varies greatly, however, in regard to violence, and in the different modifications of the symptoms.

FAVORABLE SYMPTOMS.—A general moisture over the surface, with a warm skin; the tongue beginning to clean along the edges; the urine depositing a brick-dust sediment; the delirium subsiding, and the patient being able to sleep. A crisis seldom takes place until the thirteenth or fourteenth day from the commencement of the disease, and frequently not until the end of the third or fourth week. Recoveries from this form of disease are always slow, the patient remaining in a debilitated condition both of body and mind.

Congestive Fever.—This name is applied to those cases in which the force of the cause of disease overwhelms the vital powers and prevents reaction; the patient continuing in a state of stupor and extreme prostration, as in concussion of the brain by a blow upon the head. When the constitution makes a feeble effort at reaction, producing a low grade of fever, the disease may be termed typhus, but if the prostration of the living power is such as to prevent reaction, the disease will then receive the name of "congestive fever."

In shattered constitutions, or where patients are exposed to bad air, as on ship-board, or in the crowded wards of hospitals and jails, remitting fever sometimes assumes the congestive form from prostration of vital energy, the patient remaining in the chill and stupified, with swimming of the eyes, anxious expression of countenance and great debility.

Congestive Intermittents occur in certain locations in hot climates. The chill becomes greatly protracted, and if reaction comes on, the fever will be of a low malignant or typhoid grade. It has been noticed in those places where malignant intermittents prevail, that a short chill followed by a vigorous reaction of fever is favorable; but, on the other hand, a protracted chill followed by an imperfectly developed fever is unfavorable.

Yellow Fever.—This form of disease does not differ essentially from the two preceding varieties. The symptoms are sometimes

of a violent character in the commencement of the reaction; there is an intensely hot skin, flushed face, the eyes red, extreme headache, tormenting thirst, intolerance of light, pain in the loins and lower extremities, a sense of weight and tension at the pit of the stomach, white, and sometimes clean tongue. Distressing retching and vomiting occurs, the ejections sometimes so acrid as to excoriate the throat. There is a burning heat and tenderness at the pit of the stomach, as though the patient had swallowed some corroding acid; extreme restlessness and deep sighing; a hopeless expression of countenance, and frequently delirium.

The fever or reaction seldom continues more than two or three days, when the fever subsides without any critical evacuation occurring, either by sweat, urine, or stool, leaving the patient extremely exhausted, with a weak and easily compressible pulse, and soon followed with yellowness of the skin and whites of the eyes. "The patient now remains in a state of tranquil indifference, amounting to a sort of stupor, without any apparent concern as to present or future situation. This is an ominous calm; for after a few hours the pain and burning sensation in the stomach return with increased violence; the vomiting becomes frequent and distressing—the fluid brought up containing minute flakes or flocculi, resembling the crust washed from a port-wine bottle, but little or no bilious matter," and everything that is swallowed is forcibly ejected. "This second paroxysm continues commonly from twelve to thirty-six hours, when the energies of the system are worn out in the struggle. The pulse sinks, the extremities become cold and clammy, the tongue is black, and the matter thrown up consists of a black ropy fluid resembling coffee grounds suspended in a glary fluid." The burning in the stomach and bowels is distressing in the extreme. "Diarrhea usually occurs at this period—the discharges being green, or black. Hiccough, violent delirium, hemorrhages, stupor and convulsions are apt to occur in fatal cases."

Although the above describes the general characteristics of yellow fever, still a great diversity of modifications are presented in different cases. Thus in some instances the principle of life is destroyed in the onset of the attack, and the patient expires

without any symptoms of reaction occurring. "In other instances violent and furious delirium, or mania, ushers in the disease, terminating in a few hours in insensibility and convulsions. Sometimes it commences and proceeds to a fatal termination in so insidious a manner, that the patient himself and those about him are scarcely aware that he is much indisposed. In such cases there is, however, always a remarkable change in the expression of the patient's countenance, as well as in his usual temper and habits. In almost all instances of this disease, the countenance is expressive of intense anxiety and despair during its early period, and of gloom or sullen abandonment in the last stage." I have heard it stated by a physician that of two hundred patients sick of yellow fever that came under his care during the season of the prevalence of the disease in Philadelphia, no two cases presented precisely the same modifications of symptoms.

TREATMENT OF TYPHUS, CONGESTIVE AND YELLOW FEVER.—In all those aggravated forms of disease, an energetic and persevering course of treatment should be instituted in the early stage of the disorder, before the energies of the system become exhausted.

The disease commencing with a state of extreme prostration and stupor, the third preparation of lobelia should be given freely, also stimulating injections, and friction on the surface, together with the vapor bath and stimulating applications to the skin, with a view of aiding the feeble efforts of the constitution in causing a determination to the surface, and in establishing reaction.

The third preparation of lobelia answers several important indications; besides its emetic properties it is a powerful diffusive stimulant, and it also possesses strong anti-ceptic properties. The third preparation of lobelia in a strong decoction of the bayberry, I have usually found more effectual than any other preparation of medicine in low or malignant fevers. In many cases, however, the medicine requires to be changed occasionally, more especially when disease becomes seated. In some instances the pepper sauce will suit the stomach for a time better than anything else. When the tongue is dry and the patient craves acids, the pepper sauce will generally be found beneficial.

A mixture of lemon juice and loaf sugar, in some instances, will agree with the stomach for a time, and be the only kind of nourishment that the patient can relish.

Capsicum, or Cayenne Pepper.—This is a pure and permanent stimulant, and may be administered in frequently repeated doses.

CARBONATE OF AMMONIA is a diffusive stimulant, and powerfully anti-acid, and may be given dissolved in capsicum tea or with other stimulants.

Wine Wher is also a diffusive stimulant; it also affords nour-ishment to the system, and is particularly indicated where the disease has continued for a length of time, and the system is in a state of extreme prostration. As much of the pulverized carbonate of ammonia as will lay on a five cent piece dissolved in a wineglass of the whey will overcome the tendency in the whey to sour in the stomach.

THE VAPOR BATH .- "In all cases," says Dr. Thomson, "where the heat of the body is so far exhausted as not to be rekindled by using the medicine, and chills or stupor attend the patient, then applied heat by steaming becomes indispensably necessary." The steam may be applied to the patient on a mattress or couch. A moderate sweat continued in this way for an hour, if the patient can bear it, is generally better than a profuse perspiration, in those cases of great prostration. If there be fever, or the patient is oppressed, the surface should be bathed with whisky, vinegar, or water, and always when a patient faints dash cold water or spirits in the face. It is very necessary to pay particular attention to bathing the surface, not only during the steaming, but at other times, when the skin is intensely hot, or the patient very low. After the bath the surface should be washed with vinegar or whisky, or in very low cases strong stimulants should be used, as No. 6, third preparation of lobelia, pepper sauce or stimulating liniment. The clothing of the patient should be changed frequently. In applying warmth to the patient in bed it should be a moist heat when the skin is dry or feverish, as from bottles of hot water or hot bricks wrapped in damp cloths; and when the patient is in a cold clammy sweat a dry heat may be applied, as by bottles of hot water, or narrow bags filled with hot sand, salt

or ashes, placed by the sides of the patient extending from the arm-pits to the feet. In a prostrate state of the system, or when the skin is very dry and hot, care must be observed not to occasion so high a degree of heat as to oppress the patient. Frequent bathing the surface is of great importance in all low or malignant forms of disease.

It matters not whether the disease comes on with great excitement and delirium, or with a state of congestion and oppression, as regards the general course of treatment. The emetic and injections proper in a state of congestion and extreme torpor, are equally applicable where there is great excitement in the system. I have in repeated instances observed a dose of the third preparation of lobelia, given in bayberry tea, to have great influence in moderating, and in some instances to overcome delirium; and on the return of the delirium, by repeating the dose, these symptoms again disappear; and in this way patients have in some instances been kept comparatively calm and quiet, and able occasionally to sleep, who would have been in a state of extreme restlessness and delirium without the medicine.

If the third preparation of lobelia should produce a sense of stricture at the stomach, and pain in the head, as in some rare instances it does, more especially where the patient has a dry cough, and the secretions of the skin and mucous membrane are suspended, then the lobelia may be infused in bayberry or composition tea, and strained, and given as a substitute for the third preparation.

It is recommended by some practitioners to use the cold shower bath in the first stage of the disease, where the fever is vehement. Of the utility of this practice I cannot speak from experience, never having used it except after the vapor bath.

In a more advanced period of the disease, the patient will require to be nourished with wine whey, essence of beef, mulled egg, crust coffee, &c.

Tonics.—When the tongue manifests a tendency to clear along the edges, with an occasional absence of fever, tonics will be proper, such as are recommended in the treatment of remitting and intermitting fever, as quinine, Peruvian bark, Virginia snake root, &c. The Virginia snake root may be used, however, in any stage of the disease. It answers very well given in decoction with capsicum or composition tea. Recoveries from these low forms of fevers are usually very slow, and the tonics and other remedies require occasionally to be changed. Fifteen or twenty drops of the "elixir of vitriol," given in a wine-glassful of some bitter infusion, forms a good tonic.

The vapor bath is proper in any stage of the disease, more especially if the patient be permitted to lie on a couch, sofa, or mattress, and thus avoid the fatigue of sitting up. Where the patient is able to sit up, the shower bath can be given after the bath, which is, in many instances, of especial benefit.

The continued and frequent administration of emetics will not always be required when the disease becomes seated: occasionally, however, an emetic may be needed to clear the stomach. It is in general a good rule to give an emetic whenever the patient is oppressed at the stomach, or more distressed than usual.

Patients in a state of convalescence sometimes crave hard cider, and, under these circumstances, old bottled cider will be found to increase the appetite, and to add tone to the stomach.

In all these low or malignant forms of disease, the floor of the sick room should be occasionally sprinkled with the chloride of soda; or the chloride of lime placed in dishes about the room. This will greatly improve the air of the room, and be an advantage to the patient, and afford protection to the attendants.

In a recent conversation with Dr. Shaw, who had been practicing in the west, he mentioned the case of a female who was extremely ill with a form of disease that prevailed in that section of country, and proved frequently fatal, termed congestive typhus. The patient had retained nothing on the stomach for two days; she had cramps in the limbs, and a tympanitic state of the bowels. In this condition the doctor ordered an enema to be administered of half a pint of No. 6, which, producing scarcely any impression on the bowels, the same quantity was repeated, which was also retained, occasioning much distress. Shortly after, another injection was given, composed of nearly half a pint of the third preparation of lobelia. This likewise was retained, causing great

distress in the bowels: the patient tossed about in every direction. On the following day the patient was able to sit up, and recovered rapidly. Dr. Shaw was of the opinion that the disease was on the point of terminating in mortification of the bowels, at the time these injections were given, but was prevented by their influence.

I knew an instance where injections were repeated and retained until ten ounces of the third preparation were contained in the bowels at one time. This patient also recovered, after the symptoms had assumed a very alarming character.

I was called to New Jersey to attend a young man who was ill of what is termed malignant fever. I found the patient delirious; with a dry and husky skin, and suspension of the secretions from the mucous membrane. I was informed that on the preceding day his physician, who pursued the old school practice, attempted to sweat the patient by placing hot dry bricks around him, and confining the patient by a cover held by assistants. This increased the distress so much, that it was with difficulty the patient could be kept in bed, being most of the time delirious, with a determination of blood to the head, and burning heat in the skin. Had the patient been in a cold sweat, the dry heat would have been very proper, but under the circumstances before described, such applications cannot prove otherwise than distressing and injurious. I gave this patient a preparation of salt, cayenne pepper, and vinegar, which excited the secretions of the mucous membrane, the patient beginning to raise large quantities of tough mucous from the throat and mouth. A frame was made of hoops and placed over the patient, and over the frame a quilt; under the quilt was placed a pan containing hot water. A hot brick was put in the water, and a steam created, which was continued for half an hour, wetting the face, and occasionally all over the surface with cool vinegar and water. This was not only borne well by the patient but was comfortable. He sweat freely, and under the general course of treatment pursued in bad cases, he soon became convalescent, and recovered.

In bad cases patients will generally experience more or less distress under the operation of a course of medicine; but this in general is to be considered more favorable than when the sensibility is dormant. I have repeatedly known patients to be much distressed, for many hours together, under the influence of the emetic and injections, and shortly after the disease take a very favorable turn. Patients are generally extremely weak and prostrated on the turn of a fever, or more properly when the disease forms a crisis.

### PARALYSIS-PALSY.

### SECTION IV $\frac{1}{2}$ .

SYMPTOMS.—These are a loss of the power of *voluntary* motion, sometimes of feeling, in one half or some portion of the body, the patient not losing his consciousness.

In some instances there is a loss of the power of motion, but without loss of feeling in the parts. In other cases sensibility and the power of motion are both lost. This is termed *numb palsy*.

In general the paralysed parts are colder than other parts of the body; they become soft and flaccid, sometimes puffy and dropsical. Very often patients complain of great coldness in the affected parts. Sometimes a peculiar tingling or creeping sensation is felt in the affected parts, as if small insects were creeping over them."

"When palsy arises from disease of the brain, it is generally attended with an impairment of the mental powers—amounting in some instances to complete imbecility. The memory especially is apt to suffer in this affection; and sometimes in a very singular manner." Thus some patients will lose the power of recollecting certain words, or names, sometimes even their own names, the memory being gone in relation to other things. "The natural temperament and disposition also sometimes suffer a total change from a stroke of palsy. Individuals of amiable and placid dispositions have become sullen, peevish and irrascible; and persons of an irritable and passionate temperament, have been rendered mild and simpering by a paralytic seizure.

VARIETIES OF PALSY .- Paralysis of the whole of one side of the

body is called Hemiplegia.

When both legs and the hips are palsied, it is termed Para-pegia.

When a single limb, or a particular part of the body is paralysed, it constitutes the *Paralysis Partiales* of authors.

1. Hemiplegia—Palsy of one side.—Palsy of one side of the body is more observed than any other form. "This disease is very closely allied to appoplexy," the latter being in general a more severe form of the disease. An attack of appoplexy is very often either preceded or followed by palsy.

Generally a stroke of palsy is preceded by symptoms of constitutional disturbance, loss of appetite, costive bowels, distress or extreme insensibility of the stomach, giddiness and pain in the head, continual drowsiness, more or less impairment of speech, confusion of mind, and loss of memory.

Palsy is not a very Fatal Disease.—Sometimes patients recover from a stroke of palsy in a few days after the attack; occasionally the disease terminates fatally, but most commonly the patient recovers gradually, until he is able to move about, continuing in this state, in some instances, many years without further improvement. Sometimes the recovery is complete.

Paraplegia—Palsy of the lower half of the body.—This form of palsy usually comes on in a gradual manner. The patient at first experiences numbness in the legs, succeeded by more or less difficulty in walking; his gait is awkward, and he requires a cane to assist in balancing his body. The bladder becomes more or less paralysed, the urine being voided in a small weak stream, and at length passes off involuntarily. The bowels are generally constipated; but when the spinchter muscle of the anus becomes paralysed, the fœces are evacuated without the consent of the will. In some cases the palsy is complete, the patient being unable to walk, or even to support himself in a sitting posture. In other instances the patient retains some degree of power over the motions of his legs, so that with the assistance of a cane or crutches he is able to move about.

In persons past the age of forty this form of palsy is generally occasioned by disease of the brain. In children the paralysis is, in most instances, caused by injuries of the spine.

2. Partial Palsy.—Sensibility and voluntary motion depend upon a nervous fluid, which is generated at the great centres of the

nervous system, the brain and spinal marrow, and is conducted from these centres to every part of the system, through the medium of the nerves, which act as conducting wires to the nervous fluid. There are nerves of motion and there are nerves of sensation. If a nerve of motion be cut, the part to which it is distributed will become paralysed. And if a nerve of sensation be destroyed, or injured so that it is incapable of conducting the nervous fluid, the part to which it leads will lose the power of feeling. If a portion of the brain or spinal marrow lose the power to generate nervous fluid, that part of the body will become affected whose nerves arise from that part. Thus one side of the body having lost the power of feeling, we know that the disease is seated in that portion of the spinal marrow in which its nerves of sensation originate. If that portion of the spinal marrow from which the nerves of motion arise is diseased, the parts will become paralysed to which they lead. And if both the anterior and posterior columns of one half of the spinal marrow lose their functions, that side of the body will be affected with loss both of motion and feeling.

In partial palsy, when a single muscle or small portion of the body is paralysed, it is generally owing to disease in the nerve which is designed to distribute nervous power to the part. Paralysis of one side of the face alone is sometimes occasioned by injury of the nerves leading to the part affected.

Of the Causes of Palsy.—A loss of power in the stomach is frequently the original cause of palsy, more especially when the disease attacks one side of the body. Although the immediate cause of paralysis is a loss of function in some portion of the brain or spinal marrow, still the original cause in most instances is seated in the stomach. The functions of the brain and spinal marrow, as well as those of every other organ in the body, are to a greater or less degree influenced and governed by the state and condition of the stomach. Thus a person advanced in years, and predisposed to palsy from a weakened condition of some portion of the brain or spinal marrow, will be liable to an attack of it from prostration of the powers of the stomach. Both appoplexy and palsy are frequently brought on by undigested food in the stomach, long continued exposure to severe cold or to dampness, the interm-

perate use of spirituous liquors, loss of rest, over exertion, grief, fear, and by other depressing influences, all of which operate to disorder the functions of the brain, through the medium of the stomach.

Among the exciting causes of partial paralysis, the poisonous influence of lead is the most remarkable. The tendency of this article to produce paralysis of the fore-arm and wrists is peculiarly strong, as is evident from the frequent occurrence of palsy in persons who work in lead mines, plumbers shops, and in manufactories of white lead.

TREATMENT OF Palsy.—In the early stage of palsy, a vigorous course of treatment is demanded, with a view to restore the lost function of that portion of the brain or spinal marrow, the *immediate* cause of the disease. Whether the loss of nervous power be occasioned by pressure of blood upon the parts, or from loss of power through mere debility, or even should it depend upon disease originally seated in the brain, a *course of medicine* will be especially indicated, besides the continued use of such remedies and means as will prove most successful in equalizing the circulation, and restoring the vitality of the stomach and bowels.

The course of medicine should be commenced with an injection. In most instances the bowels are extremely insensible, requiring the injections to contain strong stimulants, in order to produce the desired effect. A tablespoonful of the third preparation of lobelia, in half a pint of bayberry tea, forms a suitable injection in palsy, though in some instances double or trible the above quantity will be required, in order to make a sensible impression upon the bowels.

When the patient is unable to sit up, the vapor bath will of course be applied in bed. It is always better to steam the patient on a couch or mattress, and thus avoid dampening the bed upon which he usually lies. Patients upon a couch or cot-bed will bear the continued application of the vapor for several hours in succession; the body to be washed over frequently with whisky, vinegar, or simple cold water during the steaming.

When the patient is so situated as to be able to bear the steam a considerable length of time, an emetic should be given during

the process of steaming. The best form of an emetic is the liquid of the third preparation of lobelia, adding a portion of brown lobelia powder, and given in a strong tea of the bayberry or sumac. I have observed more benefit from emetics than from any other means. To assist the operation of the emetic, and to bring the system more completely under the influence of lobelia, it will be highly important to administer an injection of lobelia powder, in luke-warm water. The course of medicine proves most effectual when the patient becomes very sick, and the system is fully relaxed under the operation.

The Compound Lobella Pills may be used with benefit. I have a case of palsy now under treatment, and the patient has so far recovered as to be able to walk. The use of the above pills, together with an occasional emetic and the steam bath, followed by a shower bath two or three times a week has constituted the principal treatment in this case. She is now using bitters, and the bowels are relieved by injections.

Palsy, however, is a disease from which patients recover very slowly, and therefore, in deeply seated cases, it will not be necessary to pursue a very thorough course of treatment, except during the earlier stages of the complaint. Thus after administering a few courses of medicine, repeating them every day, or every few days, the course of medicine may be omitted, except occasionally, say at intervals of one, two, or three weeks, as the circumstances of the case may seem to require.

When there is oppression at the pit of the stomach, fever, foul tongue, or general distress, an emetic should be given.

Capsicum is the best remedy to warm the stomach and bowels and restore the secretions of the mucous membrane. It may be taken in the form of pills, powder, or decoction. The compound lobelia pills contain a large portion of pepper, and answers as a substitute for other preparations of pepper. In all cases of palsy the mucous membrane of the stomach and bowels is more or less coated with morbid secretions, which must be removed, or otherwise the disease will continue. When the tongue begins to clean around the edges, or the coating which covers its surface begin to soften, then the capsicum should be taken in bayberry tea. The

S6 PALSY.

pepper stimulates the secretions, sustains the circulation, and causes a determination to the surface; the bayberry combining with other foul secretions of the stomach and bowels, causes them to become detached, leaving the mucous surface clean.

A mixture of salt, vinegar and pepper, is grateful to the stomach in many cases, and is usually tound beneficial where the patient craves acid. The pepper sauce, or simple salt and vinegar, may be employed in many cases of disease, with signal benefit to the patient.

In palsy the bowels are generally costive, requiring an occasional injection. In palsy of the lower half of the body, the most powerful stimulating injections will be required, in order to make a sufficient impression upon the bowels.

Mustard Seed.—A tablespoonful of white mustard seed taken two or three times a day will stimulate the bowels to action, and is well suited to cases of palsy.

Mustard Seed and Horse Radish were favorite remedies with the late Dr. Barton, of Philadelphia, who used them with much advantage in the Pennsylvania Hospital.

Tonics.—In an advanced period of the disease, or when the system is in a relaxed and feeble condition, strong tonics will be required; such as Peruvian bark, quinine, Thomson's No. 4 bitters, wormwood, quassia. Prickly ash bark or berries may be added to the bitters.

External Remedies.—Besides the vapor and shower baths there should be a continued application of warmth to the affected side; the skin occasionally to be bathed with pepper sauce, third preparation of lobelia, stimulating liniment, or No. 6. Frictions of the surface with a flesh brush or salted towel, two or three times a day will be of advantage. Occasionally a pepper poultice or mustard plaster may be applied to the nape of the neck, extending eight or ten inches down the spine. When mustard is applied, it should not remain on so long as to produce a blister.

I'ARAPLEGIA—(Palsy of the lower extemities,) requires the same constitutional treatment as above described, adapting the remedies, however, to the circumstances of the case.

The bladder is frequently paralysed in this form of palsy, some-

times requiring the use of a catheter, to prevent an over distension of the bladder. The bowels require stimulating injections, and the free internal use of compound lobelia pills, and capsicum or pepper sauce.

THE HIP VAPOR BATH is adapted to this form of palsy. The parts, however, being in some instances devoid of feeling, are liable to be scalded by the steam unless particular attention is paid to regulate its temperature. Especial care will also be necessary to prevent the feet from being burned by hot bricks when they are placed near them.

Children are sometimes affected from birth with unusual debility, and want of power over the legs. Such cases require the cold salt water bath, or shower bath, frictions of the surface with a salted towel, fresh air, wholesome food, stimulating applications to the skin, together with internal constitutional remedies, when the general health is bad. If the digestion be feeble, or the bowels disordered, with a foul tongue and bad breath, an emetic must be given, repeated when necessary, and mild tonics used — spice bitters, poplar bark tea, or gentian.

Palsy of the lower half of the body, when of long standing, is often incurable. It is therefore important to institute a thorough course of treatment in the early stage of the disease, before it becomes immovably fixed. Palsy, however, sometimes arises from causes that cannot be removed, even though prompt remedial measures be early applied.

FOR PALSY OF THE TONGUE the patient should keep some stimulant in the mouth, such as pepper, ginger, cloves, conserve of hollyhock, &c. In severe cases the third preparation of lobelia must be employed.

IN PARALYSIS OF THE OPTIC NERVE, termed amaurosis, a course of medicine frequently repeated in the early stage of the disease will prove the most efficient means of cure. This disease frequently originates in a disordered stomach. It is not every case of amaurosis, however, that can be cured even by the most prompt and persevering course of treatment.

Palsy of one side of the Face has been cured by emetics. A full course of medicine will be more effectual. If the paralysis

arise from a destruction of the nerve, as when the nerve is cut, there is, of course, no cure for such a case.

MERCURIAL TREMOR—(Shaking Palsy.)—"This disease affects workers in mercury, chiefly those employed in silvering mirrors."

Symptoms.—At first there is slight tremor in the limbs, and sometimes salivation; afterwards convulsive agitation of the limbs whenever they are moved. The articulation becomes imperfect. The hands are so agitated that a partly filled cup cannot be conveyed to the mouth without spilling the liquid. On attempting to walk the limbs dance and perform irregular movements. Whilst sitting still the patient may remain free from chorea, but on every exertion of the volition, and on every occasion of mental agitation, the irregular movements are renewed. The sleep is disturbed, the patient wakes alarmed by terriffic dreams, nervousness and debility attend, and the bowels are constipated.

TREATMENT.—In the onset of the complaint, a removal from the influence of the cause; vapor baths, and an occasional course of medicine, together with stimulants and tonics, and exercise in the open air, may succeed in effecting a cure, or at least prevent it from getting worse.

### ERUPTIVE DISEASES.

#### SECTION V.

SMALL-Pox.—This disease is characterized by a peculiar form of eruption which affects the skin during the progress of the disease. All the other symptoms are such as occur in other acute diseases.

Small-pox is highly contagious, and may be taken at any period of life. Like measles and scarlet fever, small-pox very rarely occurs more than once in the same person.

Previous to the introduction of vaccination by Dr. Jenner, the mortality from small-pox was very great; hence it has been dreaded more than any other contagious disease.

CAUSE.—Small-pox is caused by a certain *specific* poison, communicated to the system either by inoculation or by breathing the effluvia arising from the body of one affected with the disease. There are cases of small-pox, however, which arise from causes independent of exposure to the disease in others.

From the period when the small-pox poison is first introduced, up to the time when its influence upon the system is first manifested, from seven to twenty days may ensue, though in the great majority of cases, this period is between the ninth and fourteenth day.

Small-pox is divided by medical writers into two varieties—the distinct and confluent. There is no essential difference between these, other than that the latter is a more malignant form of the disease. The eruption, instead of remaining in distinct and sepa-

rate pustules, run together and form irregular masses or patches. In some instances the pustules are *confluent* on the face, while they are *distinct* over the body.

Symptoms and Course of the Distinct or Milder Variety.—In whatever way the small-pox poison is introduced into the system, it is carried to the stomach, and upon this organ its deleterious influence is first exerted.

Chilliness and langour, loss of appetite, aching pains in the back and lower extremeties, great thirst, nausea and vomiting, with pain and distress at the pit of the stomach, are the usual symptoms accompanying the forming stage of the disease.

As the constitution reacts, the fever becomes developed, and, generally, in the course of three or four days the eruption appears. The fever, in small-pox, presents the same character as ordinary bilious fever, such as a hot and dry skin, furred tongue, costive bowels, pain in the head, and scanty, high colored urine. Bleeding from the nose is apt to occur during the first and second day of the fever. "The mind is dejected and confused, and towards the end of the third day the tongue usually acquires a bright red color."

"Shortly before the appearance of the eruption, an unusual tendency to perspiration generally occurs in adults, and frequently much drowsiness, and sometimes coma (or stupor) supervenes at this period." "In children the eruption is sometimes preceded by convulsions; but the tendency to free perspiration very rarely occurs in them." In many cases the hands and feet are cold throughout the whole course of the disease, more especially in very young children.

The eruption first appears on the face, and generally in the course of twenty-four hours, is spread over the body and limbs, "consisting at first of red points, which by the middle of the second day present small elevations, with inflamed basis, which as yet discharge no serous fluid, if punctured, but the enticle appears distended by a sort of semi-transparent plastic lymph. Towards the end of the second day, some of these pustules present small depressions in the centre; and on the following day these characteristic depressions become conspicuous in nearly all of

them. Where there are but few pustules, they often remain elevated and pointed, with but a very slight central depression; but where they are numerous they become flattened, with distinct depressions in the centre. As the pustules increase in size, their flattened form becomes more conspicuous. About the fourth day they assume a whitish color, and become surrounded by a pale red areola. When the pustules are very numerous, these areola run into each other, and give a uniform appearance of redness between the pustules.

The fever always remits or entirely disappears as soon as the eruption is fully out. By the fifth or seventh day of the eruption, the serous fluid contained in the pustules begins to change its color, "marking the stage of suppuration." As suppuration goes on, these pustules become distended with puss, and losing their flattened form, acquire a spherical shape."

The face begins to swell, generally, by the eighth day, and occasionally the eyes become entirely closed. The fever usually returns during this stage of the disease.

"Towards the end of the tenth day, the swelling of the face begins to subside," and the hands and feet, and other parts of the body, become swellen and tender.

Soreness of the throat, and a copious discharge of saliva almost invariably accompany the suppurative stage.

"As the disease advances, the pustules become gradually yellower, and more opaque, and arrive at their full state of maturity about the twelfth day. After the pustules have acquired their perfect state of development, they sometimes remain stationary for several days; but more commonly a brownish spot makes its appearance on the centre of each pustule as soon as the process of supperation is completed, acquiring at the same time a rougher aspect, and a deeper yellow. Soon after this change the pustules begin to shrink, becoming gradually drier, darker, and harder, until the matter is converted into a brown crust." These scales are frequently formed on the face, when the "pustules on the extremities have scarcely arrived at maturity." The mild form of small-pox rarely leaves the skin permanently marked or pitted.

Such is the process by which the constitution works off from the system the poison of small-pox—first, by the reaction or fever, by which the disease is thrown to the skin, and then by certain mysterious actions, there is formed on the surface the same specific poison which caused the disease.

These senative operations of the constitution, however, are liable to be perverted by various causes, and the disease to assume a malignant and dangerous character. In some instances there is a strong tendency to putrefaction,—"The heat is acrid; the perspiration clammy and offensive; watery diarrhœa often occurs; the face is bloated and red; the eyes watery and inflamed; and the appearance of the eruption, and its progress, are irregular. The pustules commonly acquire a dark or livid hue; are surrounded by brown, or almost black margins; and become filled with a bloody serum instead of pus."

Where the disease is of a violent or malignant character, the eruption, instead of being in distinct or separate pustules, appears in irregular masses, or patches, by the pustules running together. This forms the *confluent* variety of small-pox.

Confluent small-pox assumes various modifications. In some instances the disease is highly inflammatory, commencing "with strong chills, succeeded by intense febrile heat; a frequent, full, and hard pulse; high colored and scanty urine; flushed countenance; sometimes delirium; and in children often with convulsions." The tongue is dry and harsh, and frequently coated with a dark or black fur, with excessive thirst. In some instances the brain becomes greatly affected, giving rise to violent delirium, stupor and convulsions.

"The tendency to profuse perspiration, so conspicuous in the distinct small-pox, is rarely observed in the confluent variety; but profuse diarrhea sometimes occurs shortly before the appearance of the eruption, and still more commonly during the suppuration." The pustules are generally "irregular in shape, and much less elevated than in the distinct small-pox, and the parts not covered with the eruption are pale and flaccid."

"In the more aggravated instances of confluent small-pox, it often assumes a typhus character." "The chilly stage is unusually protracted; the pulse remains small, weak, and frequent, and the patient complains of much muscular prostration. Various symptoms of nervous disturbance are apt to occur-such as vertigo, faintness, twitching of the tendons, and even convulsions. The urine is colorless, and the face pale and sunken. The pustules come out slowly and irregularly, appearing simultaneously on every part of the body, vet sometimes first on the extremities." "The eruption sometimes disappears on some parts without passing into the pustular state; and slight causes, such as cold, or mental agitation, may cause the whole eruption to recede; in which case convulsions, or apoplexy, or fatal congestion and effusion into the lungs, are apt to supervene. Suppuration goes on slowly, and imperfectly; the pustules becoming filled with a thin watery pus. The intermediate skin is seldom much tumified, and remains pale."

TREATMENT.—Small-pox should be treated on general principles, the same as in other forms of disease accompanied with fever. To cleanse the stomach by emetics; to promote the action of the bowels by injections; and to sustain the vital powers by pure stimulants, constitute the most important indications in the treatment of small-pox.

The course of medicine administered in the early stage of small-pox, tends to relieve the distress, and to cause the disease to assume a favorable aspect. The course of medicine, however, will be proper at any period of the disease when the condition of the patient seems to require it.

During the cold or forming stage, the patient should be kept warm; but after the fever is established, the covering should not be too great, nor the room kept uncomfortably warm. It is also important that the room should be well ventilated. The patient's clothing should be changed every day, taking especial care that the fresh clothing be perfectly dry before it is put on.

When the pustules are distinct and not very numerous, and the symptoms are of a favorable aspect, it will not be requisite to give

much medicine. An occasional dose of the composition or pepper tea; or if the patient be a child, simple herb teas, as pennyroyal, sweet marjoram, or balm, will be sufficient. The bowels to be relieved, when necessary, by injections.

When the symptoms are very distressing, or the patient unable to bear the fatigue of sitting up, emetics may be given without previously administering the vapor bath. Much benefit may be derived from broken doses of lobelia, when the fever is violent.

The Vapor Bath.—During the chilly or forming stage of small-pox, more especially when the efforts at reaction are feeble, and the cold stage consequently becomes more protracted, the vapor bath is of essential benefit, and when followed by an emetic will seldom fail to bring on reaction. The bath also prepares the skin for the reception of the eruption.

During the eruption, an occasional vapor bath will prove beneficial, by promoting the secretions and exhalations from the skin, which is one of the principal outlets of disease. In the latter stage of the eruption, when the scabs are coming off, the vapor bath will be of especial advantage in restoring the skin to a healthy condition, and thereby prove a preventative to the various affections which sometimes follow as a consequence of an unhealthy condition of the skin. While steaming, the patient may be washed or sponged over with castile soap and water, or with a weak solution of salaratus in water. The temperature of the water should be regulated to suit the feelings of the patient. A strong decoction of sumac berries and leaves, or of bayberry powder, adding a portion of cayenne, may be given once or twice a day, in ordinary cases, or substituted for the composition and cayenne, and given several times a day. This also forms a useful gargle for the throat, which is in most instances, considerably affected.

COLD DRINKS.—Where the thirst is urgent, moderate quantities of cold water, or lemonade, may be allowed the patient, more especially after taking a dose of the hot medicine.

The Diet.—During the early stage of the disease but little nourishment will be desired. Crust coffee, barley water, elm

gruel, &c., are suitable in ordinary cases, until the disease is on the decline, when a more generous diet may be allowed, as chicken tea, milk porridge, toast and milk, soft boiled eggs, custards, &c. In the confluent form of small-pox, where the symptoms indicate great prostration of the vital powers, wine whey and the essence of beef should be given as nourishment. Five cr ten grains of the carbonate of ammonia may be added to a wine-glassful of the whey, as it tends to prevent acidity of the stomach, and also affords a grateful stimulous. Constipation of the bowels may be in a great measure overcome by a diet consisting principally of unbolted wheat flour gruel, calves' foot jelly, stewed prunes, Indian gruel, well boiled, or bread cut in thin slices, well toasted, and softened with sweet cream, or boiled milk.

When the disease is of a typhus, or otherwise malignant character, the treatment should consist of such means, both external and internal, as are best adapted to support the prostrate and sunken energies of the constitution, and to assist the stomach to cast off offensive matters, which tend to weaken and oppress its powers. I know of no better emetic, in such cases, than the liquid of the third preparation of lobelia, in a strong tea of the sumac or bayberry. A teaspoonful of the third preparation of lobelia to a tea cup half full of the above tea, and the dose repeated every hour or two, should be continued until the symptoms become more favorable. I have found it necessary in some instances, to continue the use of the third preparation for several days and nights in succession, together with pepper tea, wine whey, and carbonate of ammonia.

In some instances, the lobelia powder, put in hot bayberry tea, and then strained, answers better than the third preparation of lobelia.

The patient's clothes and bed-clothes should be changed frequently. A feather bed should be avoided, except in the middle of winter.

The "inward heat" should be maintained, to keep a determination to the surface. This may be accomplished, in ordinary cases, by an occasional dose of composition or pepper tea, or by simple ginger, or pennyroyal tea. During the progress of suppuration; but more particularly when the scabs begin to form, patients are very liable to be restless and greatly distressed. There is probably no remedy for this equal to the vapor bath. I have seen patients in great suffering and distress, rendered comparatively comfortable and quiet, in a few minutes after applying the vapor bath. Applied in bed, as directed for steaming in bed, the patient will bear it from half an hour to an hour, and even longer. During the steaming, the surface should be washed over freely with castile soap and tepid water, or salerætus water, and after the bath, the bed-clothes, as well as the clothes of the patient, changed.

I knew an instance where a patient being steamed at a time when the scabs were fully formed, and almost dry, that they came off in a body, and left the surface almost "raw," the disease having been of the confluent form, and the eruption covering almost the entire surface. An ointment made of sweet oil and lime water was spread on soft cloths, and applied over the body, and in two or three days the soreness was principally removed. This circumstance afforded an opportunity for gossips to astonish the neighbors by their description of the terrible effects of steam: fortunately for the "steam doctor," however, the patient recovered rapidly after.

During any stage of the disease when the skin is very hot, the surface may be sponged occasionally with tepid water, and the external covering be kept light. It is injurious to a patient to keep his room very hot and close. The disease is more dangerous in hospitals in consequence of the vitiated air.

Tincture of lobelia and water answers very well to sponge the surface with; but all kinds of oils or fat should be kept off, as they finally tend to aggravate the distress. A mixture of lime-water and sweet oil may be applied with benefit. The mucillage of slippery elm will afford relief, and may be applied to various parts in the form of a poultice.

CAMPHOR LINIMENT.—"Take of camphor, half an ounce; olive oil, two fluit ounces. Dissolve the camphor in the oil." This liniment is recommended as a means of preventing, or at least lessening pitting of the skin on the face. It is directed to be used in the early stage, soon after the eruption appears.

The eleventh and thirteenth days are said to be the most dangerous periods of the disease.

During suppuration, or in the latter period of the disease, the system should be nourished by the most nutritious diet that the stomach can take, such as wine-whey, milk porridge, essence of beef, mulled egg, &c. And in order to sustain the system in the latter period, the stomach should be well cleansed in the early stage of the disease, by courses of medicine. It is not in every case, however, that nourishing food can be taken, except in small quantities; and under these circumstances, pepper and other stimulants must be used to sustain the restorative actions.

To prevent Pitting.—Professors Chapman and others recommend slippery elm mucilage spread over the face, and covered with gold leaf, such as is used by the dentists, and to be applied on the third day of the eruption. I have tried the gold leaf in one case, but it did not succeed; the case, however, was of a desperate character, and I cannot say how it might answer in less violent cases. Others recommend the application of a sheep's caul, kept over the face, in order to exclude the air. To prevent pitting, it is important to exclude the light as well as the air. The gold leaf might be spread over the caul, which would prevent the admission of light.

When the eyes are very sore, they should be kept covered with soft cloths wet frequently with rosewater or raspberry-leaf tea.

Small-pox attacking females in a state of pregnancy, is considered by the medical profession as always dangerous.

The distinct variety of small-pox seldom proves fatal under judicious Thomsonian treatment; and even in the confluent form, unless under unfavorable circumstances, the system, by proper assistance, will "work out its own salvation." When the vital powers are greatly prostrated, and the disease assumes a typhoid or malignant character, it almost always proves fatal.

FAVORABLE SYMPTOMS.—A well developed eruptive fever; the pustules remaining distinct, round, and filling with thick yellow pus, and a blush or areola, encircling their base.

UNFAVORABLE SIGNS.—When the reaction or fever that brings out the eruption is imperfectly developed, indicating want of vital SIG. L.

power; a sudden subsiding of the swelling of the hands and face, with pallid countenance, or a striking in of the eruption, the case may be considered as of a highly alarming character. Whenever the symptoms assume an unfavorable aspect, a thorough course of treatment is required to arouse the sinking energies of the system.

A Case.—I was called to attend on Mrs. P————, who had violent symptoms of approaching abortion. She was in her third month of pregnancy—a period at which abortions are very liable to occur. A full course of medicine was given, which eased the pains for a time. On the following day, however, they returned, and I thought abortion must take place. The third preparation of lobelia was now given freely, until very copious vomiting ensued, when the pains ceased and did not again return. On the following day an eruption appeared, and which proved to be genuine small-pox. The eruption came out so thick that it ran together, and formed what is termed the *confluent* small-pox. The case proved to be of a severe character, but the patient recovered perfectly, and without having any return of bearing down pain, or other symptoms threatening abortion.

The above case illustrates the safety and advantage of treating all violent forms of disease upon general principles, not regarding the name by which the disease may be designated. Thus, the same means that prevented the abortion, were precisely such as were adapted to throw the small-pox to the surface. And if the symptoms of abortion had been occasioned from other causes than that of small-pox poison, still the same general plan of treatment would be indicated. Thomsonians do not require to wait for a disease to become developed, so that they can give it a name before they administer medicine. Hot medicine, and in violent attacks, a course of medicine cannot be given amiss. The same means that will assist nature in bilious fever, will do the same in small-pox, or in any other disease. It is at least probable that the thorough treatment pursued in the above case, prevented abortion by cleansing the stomach, and throwing the small-pox to the surface.

The question is frequently asked, whether the stimulating medi-

cines, given freely, will not make the eruption greater than it would have been without it? To this it may be replied: If the disease is not thrown fully to the surface, the eruption may be less, but the constitutional symptoms will be more violent and dangerous than where the eruption is greater, and the disease effectually thrown to the surface by pure stimulating medicines. To east the disease off by the surface is the method established by nature, and these curative efforts should be aided.

I am not in the habit of giving largely, hot medicine, in the early stage of the disease, nor to keep the patient covered uncomfortably warm during the fever, nor in any subsequent stage of the disease. But a thorough course of medicine will be safe and useful in any stage of small-pox, and also the free use of pure stimulants. A course of medicine in the early stage of small-pox by cleansing the stomach, will tend to lessen the eruption, and at the same time remove the disease from the internal organs. Chronic affections often follow small pox, owing probably, in many instances, to the disease not being effectually thrown to the skin, and the determining powers not kept outward.

# VACCINATION — COW-POX — KINE-POX-

#### SECTION VI.

The practice of vaccination originated in England, about the year 1796. It was introduced by Dr. Jenner.

In the year 1775, Jenner, who was then a student of medicine, one day heard a dairy maid in the office, in conversation with his preceptor, declare that she was not afraid of the small-pox (which was at the time prevailing in the neighborhood) for she had taken the kine-pox, and that dairy maids that had taken the disease from the cows never took the small-pox. This declaration of the milk girl, first gave Jenner the idea of introducing the cow-pox by vaccination, as a means of protecting the system from small-pox. Although it had been known in some of the dairy counties in England many years previous to the time of Jenner, that cows were subject to an eruptive disease which being communicated to the hands of the milkers, produced pustules, which protected them from small-pox; yet no one before Jenner ever thought of introducing a preventive to the small-pox, by inoculation with the cow-pox matter.

The opposition that Jenner met with from the medical profession, in introducing this new practice, was of the most hostile character. Two physicians in London went so far as to declare through the public journals, that introducing the disease from an animal into the human system would convert mankind into a sort of mongrel, partaking of the nature both of man and beast. It was even denounced from the *pulpit*, as an invention of *Satan*, and that the devil first introduced the practice by vaccinating Job.

After many years of devoted attention to this subject, Jenner

presented an essay to the Board of Physicians of London, containing an account of his experiments in vaccination, and furnished proof of the protection it afforded against small-pox. They, however, returned the essay, with the advice to suppress its publication, or otherwise he would be considered as either a "fool or a knave."

The frightful and ridiculous accounts related concerning vaccination, during its early struggles against popular prejudice, were probably not even surpassed in inconsistency, by the multitude of gross and palpable misrepresentations which are "wafted on every breeze," of the *danger* of *steam* and *lobelia*, and the dreadful consequences which they produce.

The practice of vaccination, however, finally gained the confidence of many medical men, and it soon became generally adopted. Jenner on his first visit to the United States for the purpose of introducing vaccination, met with strenuous opposition from the medical profession of Boston, where he first landed. Dr. Benjamin Waterhouse, then a professor at Yale College, was the first of the medical faculty who adopted vaccination. He introduced it into his own family, and about the same time Thomas Jefferson's family were vaccinated; and in a few years after, the practice of vaccination became generally adopted, not only in England and the United States, but throughout all civilized countries.

There is too much evidence to admit of a doubt that vaccination affords a protection, in general, against small-pox: that it occasionally fails of affording protection to the system, is equally certain; but it should be borne in mind, that there are many assignable causes for these failures, such as, when the matter used is of a spurious character, or its virtue destroyed by long keeping, or where erysipelatous inflammation takes place, and destroys the genuine character of the disease; or where the patient is affected with an eruptive disorder, and thus pervert or change the vaccine disease.

I attended a female, not long since, who had the small-pox in a most violent form, and who had been vaccinated. On examining the mark on her arm, I discovered a large smooth scar, nearly the size of a quarter of a dollar, showing that the scab must have been three or four times as large as a genuine vaccine scab, and that the inflammation had probably so modified the disease as to afford no protection against small-pox. The family of this female had been vaccinated, and they all escaped the small-pox. It is at least probable, that in the greater part of those cases of small-pox that occur after vaccination, the failure of vaccination in affording protection, has been in consequence of imperfection in the vaccine viris; its nature changed by erysipelatous inflammation; the vesicle broken, and the fluid escaped; or from the scab being injured or rubbed off soon after it is formed.

Concerning Vaccination causing New Diseases.—That eruptive diseases are sometimes occasioned by vaccination, is admitted: but many, and probably the great majority of instances of disease, occuring after, and attributed to, vaccination, arise from other causes, independent altogether of the vaccine viris. How often does consumption, scrofula, and chronic inflammation of the eyes, occur as a consequence of small-pox; and great numbers also die of the disease. Although small-pox may tend to purify the system, as Dr. Thomas asserts, yet there are few, probably, who have witnessed bad cases of it, that would willingly take it, rather than run all the riks attendant upon vaccination.

CHARACTERISTICS OF A GENUINE VACCINE SCAB.—Not larger in circumference than a five-cent piece, nearly round, and an indentation, or eye, in the centre; smooth on the upper surface, and a bold and regularly rounded edge; of a maliogany color; and of a horny appearance, and brittle.

How to preserve the Scab.—Kept from the air in a sealed glass vial, and in the dark, a scab will continue good for years.

To prepare the matter for Vaccination.—Take a portion of the brittle part, near the middle of the scab—place it on a piece of glass or china, and put a drop of cold water on, and when sufficiently soft, mash it with a knife-blade.

Season most favorable.—In very cold or very hot weather vaccination is very liable to fail, requiring in some instances to be repeated several times before it will take.

Age.—A child should not be vaccinated until after it is at least two months old. The usual time is about the fourth or fifth month.

PRECAUTIONS.—Be sure that the matter to be used is genuine. Do not vaccinate a child that is affected with any eruptive disease on the skin. Persons predisposed to erysipelas should not be vaccinated at a time when the disease is prevailing.

Place of Insertion.—The part to be preferred for introducing the matter, is just below the insertion of the deltoid muscle, on account of there not being so much motion in that part; or it may be done below the elbow, or under the knee on the calf.

THE GENERAL CHARACTERISTICS OF THE GENUINE VACCINE DISEASE.—First: little or no inflammation until, or after the third day from the time the puncture is made.

Second: About the fourth or fifth day, a small point of inflammation, which gradually enlarges, and in about two days a small vesicle is formed, which is depressed in the centre, and without inflammation in the adjoining skin. The vesicle enlarges, remains circular, with a regular and well defined margin, more depressed in the centre, and a small crust begins to form in the centre of the depression, by the seventh or eighth day.

Third: Between the seventh and eighth day, there is an areola or blush of inflammation formed around the margin of the pustule. This circle of inflammation enlarges, and frequently by the ninth day, it will be two or three inches in diameter, but remaining circular. The crust in the centre grows darker, "and the turged margin shining, as if the lymph was assuming the character of pus."

Fourth: The vesicle generally reaches its acme by the *eleventh* day, when the surrounding inflammation begins to subside, first immediately around the pustule, and gradually declines towards

the circumference, where it leaves, at last a mere ring.

Fifth: The fluid in the vesicle becomes thick and turbid, and soon forms into a smooth crust, of a dark brown, or mahogany color. The crust, in many instances, does not loosen and fall off under three weeks. "It leaves a permanent circular cicatrix, about five lines in diameter, and a little depressed, the surface being marked by many little pits, or indentations, denoting the number of cells of which the vesicle had been composed."

THE CONSTITUTIONAL SYMPTOMS attending the course of the vac-

cine disease are generally very slight, especially in children. In some instances, there are chills and fever, and headache, which may need some attention, though generally they soon subside without any treatment. The glands under the arms are apt to be swollen and sore, and care should be taken to avoid lifting the child with the hands under the arms, as is the usual practice.

CHARACTERISTICS OF SPURIOUS OR IMPERFECT VACCINATION.—First: There is generally considerable inflammation and raising of the skin, on the second day after the puncture is made.

Second: The scabing commences by the third or fifth day from the commencement of the inflammation, and runs its course in a much shorter time than the genuine.

Third: There is no depression in the centre of the pustule: it is raised up high, and has an irregular margin.

"When the inflammation commences on the formation of the vesicle, and assumes an erysipelatous character early, with much swelling, and the pustule assumes a blue appearance, it should not be considered as genuine."

Local Treatment.—When the inflammation becomes so great as to require attention, as it often does when the disease is of a spurious character, the parts should be bathed occasionally with tincture of lobelia, and apply a salve of simple cerate, or a preparation of sweet oil and lime-water. In some instances, a poultice of slippery elm and ginger, kept wet with the tincture of lobelia, answers better than salves. In severe cases, accompanied with much pain, the bowels should be relieved by injections, and the patient kept slightly nauseated with lobelia, or if necessary a vapor bath and an emetic given. When the swelling is very great the arm should be kept at perfect rest, in a sling or on a pillow.

# VARIOLOID — MODIFIED SMALL-POX.

#### SECTION VII.

This is an eruptive disease which bears some resemblance to small-pox. It is generally, however, of a much milder character, and runs its course in about half the time required for small-pox.

It is the prevailing opinion among medical men, that varioloid is genuine small-pox, operating upon a system which has previously undergone vaccination.

SYMPTOMS.—The first symptoms are lassitude, langour, loss of appetite, chilliness and bad taste in the mouth. These are succeeded by a chill in most cases, followed by fever. The fever, in some instances, is as violent as in severe cases of small-pox, though, in general, it is of a mild character.

By the third or fourth day of the fever, the eruption begins to appear, and in the early stage, resembles the eruption in this stage of small-pox. There is seldom any fever after the eruption comes out. There is no *secondary* fever in varioloid, such as occurs in in the *suppurative* stage of small-pox. In varioloid the eruption generally comes out at different periods, in successive crops; first on the face and breast, and often disappears there, by the time it first appears on the feet.

By the fourth or fifth day the pustules begin to dry, and by the sixth or seventh day, begin to fall off; whereas, in small-pox, the scabs seldom fall off before the fifteenth day.

The appearance and course of the eruption, in varioloid, is very diversified. In many instances there is a rash resembling measles, which preceds the eruption. It frequently happens that a portion of the eruption dries up in the course of two or three days,

whilst another portion will become filled with a watery limpid fluid, by the first or second day, and by the fourth day usually bursts, and another set will become pustular, somewhat resembling small-pox pustules, and remain four or five days longer before they form into scabs. In some cases the eruption becomes confluent, by the vesicles running together in masses or patches; but even in this form of the disease, there is seldom any secondary fever.

Varioloid is not often fatal under judicious treatment; much less so than genuine small-pox.

TREATMENT.—The indications of treatment in varioloid are to cleanse the stomach, which is the seat of the disease, by an emetic; preceed, if necessary, by the vapor bath; the bowels to be regulated by injections; and the constitutional efforts sustained by pure stimulants.

In the more violent cases, where the patient is much distressed, the *emetic* or *course of medicine* should be repeated at proper intervals, as long as the symptoms present an unfavorable aspect.

In many mild cases, simple herb teas, and a proper attention to diet will be sufficient.

The vapor bath may be employed in any stage of the disease, and will be of especial benefit where the skin remains in an unhealthy condition after the eruption has passed off.

Varioloid seldom leaves the skin permanently pitted.

# VARICELLA-CHICKEN-POX-SWINE-POX.

### SECTION VIII.

Chicken-pox is an eruptive disease, and generally of a mild character. Some medical writers maintain that varicella is a modification of small-pox, others contend that it is a seperate and distinct disease.

Chicken-pox is almost universally confined to children, and a second attack in the same individual is of very rare occurrence. Neither small-pox nor vaccination affords any protection against chicken-pox, nor does chicken-pox prevent small-pox.

Peculiarities of Chicken-pox.—In general there is some slight fever for one or two days, when the eruption begins to be disclosed, first appearing on the neck and back, in the form of small bladders filled with a pellucid fluid, which dry away and disappear on the seventh or eighth day,—before the *small-pox* passes through its first stage.

The vesicle of chicken-pox will discharge itself on being punctured with a pin. A small-pox pustule is cellular and will not discharge its contents it punctured.

In chicken-pox the eruption comes out in successive crops, some drying away whilst other crops are appearing, and thus continue for some days. The eruption produces a tingling feeling in the skin.

Chicken-pox, however, like other forms of disease, assumes various modifications. Severe cases closely resemble genuine small-pox, leaving the same kind of pits in the skin.

Chicken-pox is seldom attended with danger, instances of death from it being very rare. TREATMENT OF CHICKEN-POX.—Where the case is so severe as to demand particular attention, the treatment should be conducted on the same plan as is recommended in the mild form of small-pox, cleansing the stomach by emetics; injections to relieve the bowels, and occasionally some mild stimulant, such as composition or ginger tea, or herb teas, such as pennyroyal, mint, &c. Where large sores are formed, they should be covered with some simple salve, to exclude the air, and favor the healing.

# MEASLES.

#### SECTION IX.

Measles are contagious, and seldom occur more than once in the same individual.

This disease may be contracted at any stage of life; but mostly occurs in childhood. The middle of winter is the season in which it generally prevails.

The disease usually becomes developed either on the fifth or seventh day after exposure to the contagion; but occasionally it is not manifested until two, or even three weeks from the time the disease is contracted or imbibed.

Symptoms.—Restlessness, chilliness, and shivering; pain in the head; an increased flow of tears, and a discharge of watery humors from the nostrils, are the usual symptoms in the first stage of the disease. Fever comes on; the throat becomes sore, there is hoarseness and a dry cough; thirst, nausea, and vomiting; hurried and oppressed breathing; and pain in the loins and back. Sometimes there will be profuse sweating.

In about four or five days from the commencement of the fever, the cruptions appear in small red spots, similar to flee-bites, first on the face, and then spreading over the body and limbs. As

these spots enlarge, they unite and form red patches, of an irregular shape, leaving portions of the skin retaining its natural color and appearance.

When the disease is of a violent character, slight delirium often occurs about the third day from the commencement of the fever, and in children, covulsions are not unfrequent, a few hours preceding the appearance of the eruption.

The eruption on the face usually reaches the height of its development, on the second day after its first appearance, and on the following, begins to fade and subside. The face is mostly swollen, and in severe cases, so much so as to nearly preclude the sight. The eruption on the body fades away in the same progressive manner in which it made its appearance; so that about the eighth day from the commencement of the fever, it disappears finally on the back of the hands, where it remains longest.

Looseness of the bowels is apt to take place when the eruption begins to decline, which is not unfavorable at this stage of the disease: but where a diarrhœa occurs just before the eruption is making its appearance, it is to be considered as an unfavorable occurrence, as it tends to interfere with the regular progress of the disease, or cause it to retrocede. Active purging with cathartics may produce the same effect.

Measles occasionally resemble scarlet fever so closely that it would be difficult to distinguish between them. This, however, is a matter of little consequence, as the same course of treatment is applicable in both diseases.

Although measles, in general, are not dangerous, yet, in persons of feeble constitution, and delicate in health, they occasionally become a very formidable disease, assuming the form termed congestive, or typhus. In this form of the disease the vital powers are prostrate; a proper reaction, or fever does not cusue, or takes place very slowly and imperfectly. The countenance is pale, and the breathing slow and oppressed; the pulse feeble and laborious; the extremities cold—in short, all the vital energies are depressed. Infants are also liable to this form of measles.

TREATMENT.—In ordinary cases of measles, much medicine is not required. The vapor bath and emetic in the early stage, will

lighten the disease, and render the patient much more confortable; after which warm teas, as composition, ginger, pennyroyal, summer savory, balm, &c., in order to keep a determination to the surface, and promote perspiration, are proper. When the disease is of a more violent character, the patient much distressed or the eruption slow in coming out, a full course of medicine, should be given, and if the symptoms continue violent, repeat the course every day, until there is a manifest improvement.

Between the courses an occasional dose of composition or ginger tea; or if there should be much fever, and the tongue dry, give cayanne tea; and if the cough is dry and hard, as is usually the case, add a small portion of lobelia to the tea, sufficient to produce slight nausea. A teacup full of bayberry tea, made strong, should be given at night to an adult, and half the quantity to children. Injections of composition tea, with a teaspoonful of green lobelia: or bayberry tea, with a teaspoonful of the liquid of the third preparation, to be used as the condition of the bowels may require.

If the weather be cold, the patient's room should be kept warm, and of an equable temperature; and the patient avoid exposure to a current of air. Still, a proper ventilation of the room will be advisable, which may be effected without risk, when the patient is in bed. Where a stove is used in the room, a basin of water should be kept on it, to prevent the air from getting too dry.

The diet should be milk porridge, chicken tea, gruel, and such other light nourishing articles, as are proper in ordinary fevers; avoiding strong coffee or tea, except the black tea. Confectionary or sweet cake should not be given to children, as is frequently done; they are unfit for them in health, and much more so in disease.

Affections liable to follow Measles.—There is no disease which leaves the system as susceptible to the morbid influence of cold, as measles. In fact, the effects which frequently ensue as a consequence of measles, are more unpleasant and troublesome than the primary disease.

Consumption, inflammation of the lungs, scrofula, diseases of the eyes, rheumatism, eruptions about the head, and running from the ears, are not of uncommon occurrence after measles. The liability to these affections, however, will be greatly lessenned when the Tomsonian practice is employed. A vapor bath about the time the eruption disappears, and the skin is peeling off, will tend to restore a healthy action in the skin, and diminish the liability to secondary forms of disease. If the tongue have an unhealthy appearance, and other symptoms which indicate a disordered stomach and bowels, a full course of medicine should be given, and use some stimulants to keep up a determination to the surface, together with a dose of the bayberry or sumac tea once a day.

Death seldom occurs from measles where Tomsonian treatment is employed. Under unfavorable circumstances, however, as when two or three patients are crowded in a small room, badly ventilated; or when it occurs in persons predisposed to consumption, or to scrofula, it occasionally becomes an unmanageable disease.

DIET.—During the first period of the disease, and until the patient becomes convalescent, the diet should be light, such as elm gruel, rice, tapioca, sago, custards, crust coffee, &c.; and as the disease declines, a stronger diet may be allowed, as milk porridge, soft boiled eggs, chicken soup, &c., &c.

Strict attention should be paid to keeping the feet dry, and to avoid exposure to cold and damp weather.

# SCARLET FEVER.

### SECTION X.

Scarlet Fever assumes many grades of violence, from a very mild to that of the most malignant form of disease. It is generally treated of under three varieties.

First. The simple or milder variety.

Second. The *inflammatory*, where reaction or fever is of a high grade: and

Third. The *malignant*, where the vital powers are greatly enfeebled by the force of disease: the treatment, however, is to be conducted upon the same general principles, varying in promptness according to the violence of the disease.

General character and course of the simple variety.—Beginning with the usual premonitory symptoms of acute disease, such as paleness of the skin, loss of appetite, lassitude and chilliness. These continue for an indefinite period, "varying from one to three or four days," when reaction takes place, and the patient experiences flushes of heat, pains in the head, loins, and extremities; sickness of the stomach; the skin becomes dry and hot, and the pulse frequent and quick.

"Generally within the first forty-eight hours after the commencement of the fever, a scarlet eruption comes out, first on the face, and then successively, on the neck, trunk, and extremities." "The rash consists of innumerable red points, which, running into each other, gives a diffused blush over the skin." In some cases the eruption appears in patches, "leaving the skin in the intermediate space of its natural color."

Usually by the fourth or fifth day, the eruption and fever begin to decline; critical evacuations ensue, such as a copious discharge of urine, depositing a reddish sediment; a general warm perspiration; and sometimes diarrhæa. About the eighth day after the commencement of the eruption, the skin begins to roughen and peel off, at which time there is considerable itching over the surface.

Sometimes the disease assumes a more violent character—there is much distress and sickness of the stomach, together with severe headache and general weakness. The reaction or fever comes on early, "with a feeling of stiffness and dull pain in the muscles of the neck and under the ears, and angles of the jaws." The throat becomes swollen, which renders it difficult for the patient to swallow; a hoarseness of the voice takes place, and there is a "sense of constriction in the throat." The fever assumes a high grade of violence; the skin is dry and harsh; the tongue dry and of a bright red along the edges, and over its surface the little glands, or papillæ may be seen projecting. "The eruption does not come

out as early in this as in the milder form of the disease, and it is seldom diffused over the whole surface—appearing in irregular and not very large patches, on different parts, more particularly about the elbows. In some instances the rash disappears, and reappears partially at unequal portions of time, but without any corresponding change in the general disorder and the whole duration of the complaint is thus lengthened.

If the disease begins to decline by the fourth or fifth day of the fever, the throat rarely ulcerates, the swelling and inflammation subsiding as the disease abates. Where the disease is more protracted, "small ulcers are apt to form on the palate and tonsils, which are soon converted into superficial sloughs." "There is always a considerable quantity of viscid mucus secreted in the fauces, which often concretes into white flakes on the inflamed parts and presents the appearance of ulcers, where in reality none exists." As the disease gives way, "the sloughs in the throat begin to separate, and leave red ulcerated surfaces, which generally heal without difficulty. Sometimes, however, instead of separating about the eighth day, the sloughs enlarge, become brown, and discharge an acrid saneous fluid; and in such cases the glands about the neck are generally swollen, hard, and painful; and the patient is harassed with painful diarrheea and tenesmus. The inflammation occasionally extends into the trachea, and the patient dies under symptoms of acute bronchitis. The brain often becomes prominently affected during the eruptive stage, giving rise to deep and sometimes fatal stupor.

Malignant Scarlet Fever.—This form of the disease is marked by a general prostration of vital power. The reaction, though it may be apparently vigorous in the commencement, soon

declines into a low, or typhoid fever.

The eruption comes out irregularly, and is usually pale in the commencement, but "acquires a dark, or livid hue, in the progress of the disease. The eruption often strikes in soon after its first appearance, and in two or three days reappears on some part of the body.

The skin varies in its temperature; generally it is not very high, though occasionally there is a burning, acrid heat, over the sur-

face. The brain is much affected early in the disease. The patient becomes delirious; the eyes are inflamed, and dull, and the cheeks suffused with a livid flush, readily distinguished from the bright red which occurs in a less malignant form of the disease. "The tongue is dry and covered with a brown or dark fur, and the breath fœtid." The ulceration of the throat assumes a very malignant character, and frequently it is converted into black and offensive sloughs, accompanied with an acrid secretion from the nose, which excoriate the parts with which it comes in contact. "The fever and ulceration of the throat frequently exist without there being any eruption developed during any period of the disease: this is called putrid sore throat. In some instances the vital powers are prostrated in the commencement of the disease to such a degree, that reaction does not take place." "The patient becomes pale, faint, and oppressed;" there is much distress and oppression at the stomach, with nausea and vomiting; giddiness, and a sense of weight in the head; and extreme debility. The breathing is oppressed, and sometimes there is a mixture of paleness and lividity on the cheeks. "The pulse is slow, irregular, and weak." "The bowels are torpid in the beginning, but towards the termination of the disease, diarrhea almost always occurs in fatal cases." The eruption is at first pale, or of a copperish hue, which subsequently becomes purple.

Malignant scarlet fever, in some instances, terminates fatally as early as the second, third, or fourth day. In other instances, the vital powers will struggle with the cause of disease for weeks, occasioning a low typhoid fever, until finally, either the disease or the energies of the system are exhausted, thus terminating either fatally or in convalescence.

A milder form of scarlet fever may assume a dangerous character, by two or more patients sick of the disease, being in the same room; more especially if the room be small, and the patients kept near each other. The exhalations from a patient sick of scarlet fever, will sometimes occasion a tingling in the nose, and even in the skin of the physician or nurse; and when patients are placed near each other, the disease will always become aggravated by it, and in many instances, prove fatal.

Scarlet fever, in its mild form, occasionally so closely resembles measles, that it becomes difficult to distinguish between them. The indications of treatment being the same, however, in both diseases, the difficulty of determining the name will occasion no embarrassment in directing the treatment.

Causes.—Though evidently contagious, still there is the most conclusive evidence that the disease is frequently produced by atmospheric causes, together with exposure to cold and dampness.

TREATMENT OF SCARLET FEVER.—A course of medicine, administered in the early period, will generally moderate the symptoms through the whole subsequent course of the disease, and in some instances will almost break it up at once.

In the mild form of the disease, after giving a course of medicine, or simply an emetic, as long as the symptoms are of a mild character, nothing more will be required than to give occasionally of some mild stimulant, such as composition or ginger tea, or simple herb teas, such as pennyroyal, catnip, sweet marjoram, &c., and an occasional enema, to relieve the bowels; together with small doses of the tineture of lobelia, more especially at night.

Where the symptoms are more violent, and the patient much distressed, a course of medicine should be administered daily, and small doses of lobelia given every hour or two, in composition, bayberry, or pepper tea. It is not always requisite to administer the vapor bath previous to giving an emetic, as in some instances free vomiting should be produced two or three times in every twenty-four hours. Where the tongue is dry, and the patient thirsty, the pepper tea will answer better than the composition. Where the skin is very het and dry, it will be difficult to produce perspiration, even by the vapor bath, without frequently washing or sponging the surface with cold water, or tepid vinegar and water, or what is still better, salaratus water. A tablespoontul of cold water may be allowed the patient occasionally, where the tongue is dry.

Sponging the surface with cold salarratus water, or weak ley, may be safely employed during the first two or three days of the fever, when the patient is very restless, and the skin hot and dry, and the patient is not chilled by it. After this period it will be

safer to use tepid ablutions of weak ley, or salaratus water, to reduce the heat of the skin, and quiet restlessness.

INJECTIONS are of essential benefit in the treatment of scarlet fever, as they not only relieve the bowels, but tend to equalize the circulation. They should be prepared in the usual form—either of composition tea, adding a teaspoonful of lobelia powder, or bayberry tea, adding a teaspoonful of third preparation of lobelia.

In violent cases the injections should be repeated every two hours. An occasional injection prepared of lobelia powder and warm water, will be found of benefit in relaxing the system, when the fever is very high; the injection should be retained in the bowels fifteen or twenty minutes. Sometimes this will occasion free vomiting, and prove of especial benefit. Care will be necessary not to keep the patient too warm, externally, when the fever is high. A hot stove room is very oppressive to the sick, unless water is kept constantly evaporating on the stove, to prevent the air from becoming too dry.

Precaution.—More than one patient affected with searlet fever should never be admitted into the same room, where it can be avoided. This precaution is of the very greatest importance.

TREATMENT OF MALIGNANT SCARLET FEVER.—Generally, the reaction commences violently, the system being thrown into a state of tumultuous excitement; but, from the power of the cause of disease, the vital energies soon become exhausted, and the fever assumes a low malignant or typhoid character. In other instances, the vital powers are overwhelmed in the outset of the disease, and are unable to bring on reaction. The patient remains cold, and in a state of stupor, or he is thrown into convulsions.

In either case, the treatment should be prompt and energetic, consisting of emetics, of either the liquid of the third preparation of lobelia, or some other preparation of lobelia, rendered stimulant by the addition of capsicum, or the No. 6, and given in the bayberry tea. This, together with stimulating injections, and external warmth, will be the surest means of establishing reaction. To sustain the curative efforts of nature, active stimulants should be employed, as the third preparation of lobelia, in composition, bayberry, or capsicum tea, wine whey, and carbinate of ammonia.

A tablespoonful of capsicum tea, and as much wine whey, with about five grains of the carbonate of ammonia, forms an excellent stimulant in all low sinking states of the system.

If the skin is dry, a moist heat should be kept around the patient, as hot bricks wrapped in damp cloths; but where the skin is cold and clammy, a dry heat will be proper, together with warm frictions and stimulants to the surface.

"The capsicum," says Dr. Eberle, "appears to be a particularly valuable remedy in this variety of the disease. This article was first employed in malignant scarlatina, by Dr. Stephens, in a very fatal epidemic which prevailed at St. Christopher's, (West Indies,) in 1787, and it has since received the decided approbation of many eminent practitioners." The form in which the faculty employed it, is similar to Dr. Thomson's pepper sauce — a tablespoonful of capsicum, and two teaspoonsful of fine salt, to half a pint of boiling water strained, and add an equal quantity of good vinegar. For an adult, a tablespoonful every half hour; for children, a less quantity, in proportion to their age. The throat to be frequently gargeled or washed with it. "Stephens asserts that he employed this remedy in about four hundred cases, and with surprising success. The ulcers in the fauces soon cast off their sloughs, and commenced to heal; a general pleasant warmth was diffused through the system; and the vital powers speedily assumed a more active condition." There is, however, such an antipathy against cayenne pepper, that nurses sometimes refuse to give it, because it makes the child cry, and they have heard others say it is too hot for children. I have never observed any ill affects from the use of cayenne pepper, either in the young or old, but many children die, who probably might have been restored to health, by a free use of this pure stimulant. The capsicum tea I find to answer as well, or even better than the pepper sauce, more especially in cases where the stools are of a green cast, or emit a sour smell. As much cayenne as will lay on a five cent piece, and double the quantity of composition powder, mixed in a tablespoonful of bayberry tea, answers better, in many instances, than giving the tea without the powder: the dose to be repeated every two or three hours.

When the patient is thirsty, pennyroyal, or any other simple herb tea, may be allowed to be taken freely.

Applications to the Throat, externally.—In all cases where the throat is much affected, a warm poultice should be applied. This may be made of Indian mush, well boiled, adding a portion of ginger, and when the poultice is spread, cover the surface of it with lobelia powder. The poultice should be renewed, or warmed occasionally, and not allowed to become cold. Slippery elm, or flaxseed will answer as well as the Indian mush.

Gargles.—In the early stage of the disease, the tineture of lobelia answers well as a gargle. The capsicum tea, or pepper sauce, however, forms the best gargle in scarlet fever, and may be used frequently during the whole course of the disease. Swabbing the throat with the capsicum tea, or pepper sauce, is still more effectual than the use of gargles; and in young children who cannot use the gargle, the swab must necessarily be used. This is to be done with a piece of sponge, or rag, tied firmly on the end of a stick. Dip the swab in the preparation, and rub over the throat. This is sometimes a difficult operation in children, but the benefit to be derived from it should induce nurses and parents to be persevering in its use. A soft piece of wood placed between the jaws, will enable the nurse to apply the swab more effectually. The child's head should be held firmly.

The Diet, in the early period of the disease, should consist of liquids, such as barley water, arrow root gruel, crust coffee, elm gruel, and gum arabic water. In a later period of the disease, a more nutritious diet may be allowed the patient, as milk porridge, essence of beef, mulled egg, and egg custards. In a sinking state of the system, wine whey, with carbonate of ammonia, will be proper.

Scarlet fever is liable to be followed by dropsical affections, from exposure to cold, or inaccuracies in diet, before the patient has fully recovered from the primary disease. As long as the tongue remains coated, or does not present a healthy appearance, care should be taken to avoid exposure to cold or dampness; and the diet should be confined to such articles as are easy of digestion. I attended a little boy in Second street, who had anasarca,

or general dropsy, following scarlet fever. Under the treatment, the symptoms all became more favorable, and the patient began to recover rapidly; but from eating heartily of broiled mackerel, which his stomach could not digest, dropsy of the chest ensued suddenly, and the case terminated fatally in less than forty-eight hours after.

An occasional vapor bath, followed by a shower bath, and the surface rubbed dry, and bathed over with some stimulating preparation, as pepper sauce, or No. 6 and water, equal parts, will tend to prevent dropsy, or other affections that might otherwise ensue, as a consequence of scarlet fever. The spice bitters, or other tonics, as Virginia snake root, or colombo, should be given two or three times a day, to assist in restoring digestion.

Where dropsy has ensued, the bath should be administered daily, as above directed, and followed sometimes by an emetic; broken doses of lobelia given either in tincture or pills, together with an occasional dose of composition or pepper tea; and as the swelling subsides, and the tongue becomes more natural, tonics will be proper.

A Case.—I was called to attend a young man who had been ill of scarlet tever about a week. The rash had been from the beginning, alternately appearing and disappearing. The fever was of a low grade, and attended with delirium. The principal medicines used in this case, and which proved successful, were the liquid of the third preparation of lobelia, in a strong decoction of bayberry tea-a teaspoonful of the former to a teacup half full of the latter, repeated every two or three hours, in continued succession for several days and nights; together with an occasional injection of the same kind of compound. This medicine always quieted the delirium for an hour or two, and occasionally under its influence the patient would sleep. As the delirium returned, the dose was repeated, and these symptoms would again subside. The patient generally vomited once or twice in the course of twenty-four hours, but seldom complained of sickness at the stomach. Under this treatment, together with an occasional vapor bath, administered on a mattress, the patient recovered. The diet consisted principally of wine whey and essence of beef.

The Thomsonian practice is generally successful in scarlet fever, when applied in the first outset of the disease, though occasionally it baffles the most thorough and judicious treatment. The treatment pursued in the above case is given in order to point out a course that may prove successful in other aesperate cases. In bad cases of scarlet fever, the floor should be sprinkled three or four times a day with a few teaspoonsful of the chloride of soda, or the chloride of lime placed in vessels about the room. This is more especially necessary where there are more than one patient in the same room.

# NETTLE-RASH — HIVES.

#### SECTION XI.

This is an eruption resembling the rash produced by striking the skin with nettles. The skin is raised, and whitish on the top, with a hardness and swelling around the margin, and more or less inflammation, and is attended with painful itching and tingling.

There is a tendency in nettle-rash to disappear and reappear suddenly, and thus continues for several successive days.

In some instances, the eruption comes on only at night, with an itching and tingling over the whole body, and when the skin is scratched or irritated, large *weals* immediately rise up, with a paleness or whiteness on the centre, and light red margins, attended with intolerable itching and stinging pain.

Occasionally the disease becomes chronic, the swelling remaining stationary for weeks, or even months.

CAUSE.—Nettle-rash is caused by a disordered condition of the stomach and bowels. Eating shell-fish will sometimes bring it on. Balsam copaiva, where it disagrees with the stomach, will occasionally produce this kind of eruption.

TREATMENT OF NETTLE-RASH.—The vapor bath, and a lobelia

emetic, will, in many instances, remove the disease at once. If the first operation fail of effecting a cure, repeat it at proper intervals, until the general health is restored; giving occasionally composition or spice bitters; and cleanse the bowels by using injections, prepared in the usual form.

In milder cases, purified charcoal, taken in composition tea, two or three times a day, together with one or two injections, will be sufficient to rectify the constitutional derangement.

A friend of mine informs me that half a teacupful of saffron tea, sweetened, and taken at bed time, will overcome the symptoms.

The Diet should be simple; avoiding all gross food. Where the disease has become seated, let the accustomed diet be changed to other articles of equally nutricious qualities.

Local Applications.—In recent cases, the tincture of lobelia, vinegar and water, or alcohol and water, may be applied immediately to the eruption. In chronic cases the stronger stimulants should be applied to the swellings, as the No. 6, third preparation of lobelia, pepper sauce, or stimulating liniment, &c. All eruptive diseases of this kind are to be treated upon the same general principles.

# ERYSIPELAS - ST. ANTHONY'S FIRE, OR ROSE.

#### SECTION XII.

This form of disease is characterized by a redness of the skin, swelling, a tingling burning pain, and the formation of blisters on the inflamed surface.

Erysipelas probably never occurs except there be previous derangement of the general health. Usually the first symptoms are languor, chilliness, headache, loss of appetite, and other signs of a disordered stomach. These symptoms are followed by two or three days fever, before the erysipelas makes its appearance. In some instances the fever is violent; in other cases it is of a milder character, and occasionally, though very rarely, the inflammation appears simultaneously with the fever.

"The inflammation comes out in the form of an irregularly circumscribed stain or blotch, which soon spreads over a greater or less extent of the contiguous surface." There is always more or less swelling, even at the commencement of the inflammation, and a burning, tingling pain, but the part does not throb or pulsate, except in very violent cases, and where suppuration takes place in the cellular tissue.

Usually by the third or fourth day, blisters are formed on the inflamed surface, filled with a "limpid or yellowish serum." In the course of two or three days, the blisters break, occasionally forming crusts, or large scales. In less than a week, in favorable cases, the inflammation and swelling begins to subside; the skin becomes pale, or of a yellowish cast, and presents a rough appearance, and shortly after the old skin peels off.

Erysipelas is generally confined to the skin, though in some instances, the inflammation extends to the adjacent cellular tissue. In cases of this kind, the pain is more severe, and the parts become extremely tender, and painful on the slightest pressure. The constitutional disturbances are generally severe, and the complexion sallow, indicating derangement in the functions of the liver. Frequently, in the severe form of the disease, suppuration takes place in the parts beneath the skin, and the patient experiences irregular chills. "The redness of the skin and the pain subside, but the swelling increases; there is much doughiness, and the parts remain in this state for some time" before the pus will find its way to the surface. When the fluid escapes, it frequently has the appearance of whey, and contains shreds of cellular tissue, like tow, or shreds of cotton.

The face and limbs are most liable to erysipelas. When it attacks the face, the swelling, in many instances, is so great as to entirely close the eye-lids. More or less mental derangemet usually attends such cases, especially when the inflammation extends over a considerable portion of the scalp.

The danger from erysipelas is not great, except when the brain is attacked by it, or when it occurs in vitiated or broken down constitutions, and the disease assumes a typhus character. There is a form of erysipelas which attacks females about a year old, appearing first on the vulva, and subsequently becomes inwardly seated, and generally fatal. I have seen a case of this kind, attended with sloughing of the vagina, and where the inflammation finally extended over nearly the whole of the body. This patient died in about three weeks from the commencement of the attack. In this case the stomach and bowels were much disordered previously to the occurrence of the erysipelas.

In many instances, the disease is brought on by eating unwholesome food.

TREATMENT.—The most important indication for the cure of erysipelas, is to correct the disordered condition of the stomach and bowels.

A Thomsonian course of medicine I have known in many instances to check at once the farther spread of the inflammation. Where the inflammation is on the face, the bowels should be relieved by injection, before the emetic be given. In mild cases, and where the general health is not much impaired, the treatment may be correspondingly mild. An enema to evacuate the bowels, together with hot teas, to keep up a moderate perspiration, will be sufficient in the way of constitutional treatment, as long as the symptoms continue favorable. A wineglassful of lime water, adding half the quantity of boiled milk, given two or three times a day, may be taken to correct the secretions of the stomach.

Where the countenance is sallow, indicating derangement of the liver, or where the fever is high, or the patient much distressed, the treatment should be more thorough. The enemas should be repeated occasionally, always containing a portion of lobelia. An emetic should be given as often as every day, in violent cases, and continue to give broken doses of lobelia, in composition or bayberry tea, or lobelia may be given in the form of pills. A teaspoonful of lobelia powder, given by injections in warm water, and retained in the bowels, will in general relax the system more, and prove more serviceable than administered in any other way. Free vomiting may often be effected in this way.

In all severe cases it is importent to keep the system more or less relaxed by small doses of lobelia; and likewise, to give occasionally, either composition or pepper tea. The room should be kept of a moderate temperature. Very hot stove rooms are pernicious.

The parts affected should be kept elevated, if practicable: thus, if on the face, the head must be raised higher than the body, or if on the limbs, they should be kept elevated, which favors the return of the blood from the inflamed part.

Of all means for the cure of erysipelas, *emetics* are the most effectual. Besides fulfilling other important indications, they have an influence in restoring the secretion of the liver. It is the opinion of some medical writers, that the *liver* is more or less diseased in all cases of erysipelas. Emetics may be given without previously administering the vapor bath, but where the inflammation is on the face, it will be proper to use the warm foot bath, and an injection, previously to giving the emetic; and to continue warmth to the feet, by hot bricks wrapped in damp cloths.

THE DIET should be confined to the lightest kind of food, as slippery elm gruel, barley water, crust coffee, &c. In mild cases, or where the patient is on the recovery, more generous diet may be allowed, such as milk dishes, custards, boiled chicken, toast and tea, &c.

Where the attending fever is of a low typhoid character, with great prostation of strength, the stupor, or low muttering delirium, and coldness of the extremities, active stimulants should be employed. The remedy most to be relied upon in such cases, is the liquid of the third preparation of lobelia, in a strong tea of the bayberry or sumac. The dose to be of the usual quantity, and repeated at intervals of from two to four hours. This medicine will cause the patient occasionally to vomit, and the matter thrown from the stomach is generally of a very foul character, consisting chiefly of thick brown flakes of morbid secretion, which had previously coated the mucus membrane of the stomach, and which, if not removed, would continue to oppress the functions of that organ. I have witnessed recoveries under this mode of treatment.

in various forms of disease where the symptoms were such as are generally considered fatal. Beside the above remedy, the capsicum tea, earbonate of ammonia, Virginia snake root, wine whey, and essence of beef, may be employed to nourish and sustain the enfeebled forces of life.

Local Applications.—As a local application to the inflamed surface, the liquid part of the third preparation of lobelia has done well in all cases where I have employed it; for although a powerful stimulant, the patient generally has experienced less burning in the part than before its application. Soap liniment, opodeldoe, sweet oil and lime water, and tar ointment, may either of them be applied to the parts affected; there are some skins which all kinds of grease disagree with; in such cases a liniment would be improper. When the inflammation is on the limb, and the part remains swollen after the inflammation subsides, a bandage should be applied, commencing at the extremity of the limb, and bandaging upwards.

Where there is evidence of an accumulation of matter in the parts, deep incisions should be made in order to give the matter an early opportunity to escape.

Children predisposed to erysipelas should not be vaccinated until the general health is restored.

As a general rule, poultices do not answer a good effect in erysipelas, except when the parts ulcerate, or become gangrenous; then the application of poultices may be useful. In ease of simple ulceration, use a poultice composed of elm, ginger, pond lilly, and pounded cracker; but in eases of gangrene, or mortification, the charcoal or yeast poultice will be more appropriate.

# SHINGLES.

### SECTION XIII.

This form of disease is characterized by a cluster or band of blisters on an inflamed surface, commencing, in most instances, on the right side of the abdomen. In some instances this band of vesicles extends down to the groin, in others it passes upwards. It is very rare that this eruption occurs on the left side of the body.

"This disease bears a very close resemblance to erysipelas," and arises from a disordered state of the system. "Loss of appetite, lassitude, slight headache, nausea, more or less febrile irritation, together with scalding heat and tingling in the skin, and shooting pains through the chest and stomach, are the symptoms which usually precede the eruption."

The vesicles are transparent until the fourth or fifth day, when they acquire a yellowish or milky appearance, and in the course of a day or two break and form brown crusts, and in a few days after fall off. In some instances the skin ulcerates and leaves scars.

Shingles very seldom attack any but young persons, and rarely, if ever, happen to children under three years of age.

Not dangerous.—Shingles are rarely dangerous. The eruption, however, occurring in a highly diseased or exhausted constitution, may be followed by dangerous consequences, from the supervention of gangrene.

TREATMENT OF SHINGLES.—Little need be said in relation to the treatment of this disorder. The same local applications may be used as recommended in erysipelas, and when the general health is much affected, an emetic to cleanse the stomach will be proper. Mild stimulants to promote perspiration, composition, ginger, pennyroyal, &c. If the bowels require attention, use enemas. Lime water with milk is good to correct the secretions, where the stools are acrid or of a greenish cast.

The diet should be light, consisting of gruels, milk, toast and milk, elm gruel sweetened with loaf sugar, adding a portion of lemon juice. Cold drink in moderate quantities, may be allowed the patient, of which lemonade is generally the most grateful. When the bowels are costive, a gruel made of unbolted wheat flour, has a good effect.

# SCALD HEAD.

#### SECTION XIV.

This name is given to a certain form of eruption which comes on the head. It commences with small ulcers which discharge a humor that forms into thick crusts or scales. In some instances nearly the whole of the scalp becomes affected, forming a continuous mass or scab, attended with paroxysms of intolerable itching; and emitting an offensive odor. Sometimes the humor discharged is extremely acrid, producing an eruption wherever it comes in contact with the skin, and in this way the disease not unfrequently spreads partly over the face, and extends down the neck to the back and shoulders. The glands about the ears are often swollen.

Scald head is occasionally met with in adults, though it is very generally confined to children, and unless correctly treated may continue even for years.

TREATMENT.—The most important point in the treatment of scald head is the exclusion of air from the parts affected. To accomplish this, cut the hair off close, and apply Thomson's healing salve, or an ointment made of tar and suet; and put on a cap, either of bladder or of oiled silk. This will prevent the formation of scales, though the discharge of matter will continue until the parts heal. The cap should be taken off every day, and the parts that suppurate cleansed. By gently pressing a dry cloth on the parts, the pus will adhere to it, and in this way be removed.

Then apply fresh ointment, and put on the cap, which should be rubbed over on the inside with tallow or oil, to prevent its adhering too closely to the salve or ointment.

The head should never be wet with any kind of wash, except occasionally, when the itching is very annoying, which may sometimes be relieved by washing with a strong tea or tineture of bayberry or sumac. A strong tea made of common soot also answers a good purpose.

Constitutional Treatment.—In bad cases a sweat and an emetic should be given every week or oftener, as the symptoms indicate. This will greatly facilitate the cure. Lobelia, given in small doses, is of especial benefit in all kinds of eruption. It may be given in pills, or in tincture, several times a day, in quantities merely sufficient to excite slight nausea.

The composition powder, mixed with sugar and warm water, should be taken once or twice a day, more especially if the tongue be coated. The bayberry or sumac tea may be used for the same purpose.

The spice bitters, or any other simple tonic may be used to strengthen digestion.

Costiveness may generally be relieved by proper articles of diet, as stewed prunes, gruel made of unbolted flour, with the addition of a few raisius, stewed figs, rye mush, roasted apples, and ripe fruit in season. The diet, of course, is not to be confined to such articles exclusively.

There is a scabby eruption that prevails among children generally, commencing back of the ears, and frequently spreading over the cheeks, and on the head, resembling scald head. This eruption is to be treated the same as scald head—apply the ointment to exclude the air, keep the parts dry, and restore the general health by appropriate constitutional treatment.

The following preparation may be used in place of the external application above mentioned.

Liver of sulphur, three drachms, Spanish soap, one drachm, Lime water, eight ounces, Rectified spirits of wine, ten drachms.

To be mixed and melted together, and applied to the affected parts night and mornng.

# TETTER.

#### SECTION XV.

There are various forms of eruptions to which the name tetter is generally applied, all of which, however, depend chiefly upon a disordered state of the stomach and bowels, and require much the same kind of treatment.

That which is termed *dry tetter*, consists of red blotches on the skin covered with pimples, which itch very much. The eruption forms white scales, like fine bran, which fall off, leaving the skin apparently healthy. The eruption reappears and repeats the same operation as before, and in this way will continue to disappear and reappear indefinitely.

Pustular Tetter.—In this variety the eruption appears in clusters of small vesicles or blisters, containing at first a thin serum, which in a few days becomes yellowish, and breaking, form thin crusts or scabs, which fall off, leaving the skin in many instances in a healthy condition, except a slight degree of redness; occasionally the skin becomes exceriated. There is a sense of smarting, and sometimes pain attending the eruption. Not unfrequently the eruption reappears at intervals, and the disease this way may be prolonged for weeks or even months.

Corrolling, or Eating Tetter, as it is called, commences with small painful sores or ulcers, which soon spread into large spots of various forms and sizes, and discharge a thin watery humor. This humor is sometimes so acrid as to produce new sores wherever it comes in contact with the surrounding surface. This species of tetter is apt to spread rapidly and occasionally forms deep ulcers which are difficult to cure.

There is another species of tetter, appearing in the form of hard, dry, red spots, usually about the size of a millet seed. This eruption is mostly observed on the face and neck, though in some instances, it extends over the whole body. Depending in general

upon chronic derangement of some internal organ, especially torpor of the liver, and obstinate constipation of the bowels, it not unfrequently becomes a seated disorder, and may be cured only by revolutionizing the constitutional efforts of the system.

TREATMENT.—In some cases, the constitutional derangement or debility may be rectified by a change of habit. For instance, if the habits be sedentary, the patient should take exercise in the open air, especially after meals; and use especial care to keep the feet warm and dry. A change of residence from one part of the country to another, or from the city to the country, will, in many instances cure long standing complaints, where medicine, without change of residence, may fail. To regulate the bowels, which are generally costive where this kind of tetter exists, I have used the purified charcoal in composition, or spice bitter tea, with general success. The dose of the charcoal is a large teaspoonful three or four times a day. Two or three pills composed of lobelia and capsicum, taken at bed time, are useful also in regulating the bowels. The diet should be such as best suits the patient's constitution, avoiding, however, hot bread, sweet cakes, fat or salt meat, or strong coffee. Bread made of unbolted flour, is proper in all cases of costiveness. Washing or sponging the body occasionally with salt water, as soon as out of bed, and using friction to the skin with the flesh brush, or a dry salted towel, will give tone to the nervous system, and increase the constitutional strength. The vapor bath, followed by the shower bath, may be used when the patient is too chilly to bear the washing with cold salt water alone. Exercise in the open air, cleanliness, and warm clothing, are of importance in all disorders of this kind.

An occasional course of medicine and the free use of bitters to restore digestion, may be necessary in effecting a cure in obstinate cases of tetter.

TREATMENT OF THE DRY TETTER.—There are various washes and ointments that may be used with benefit. The best, however, according to my experience, is a tincture of sumac berries in No. 6, or the third preparation of lobelia, to be applied frequently, and the parts anointed, especially at night, with Thomson's healing salve, tar ointment, or yellow dock ointment.

If the patient require medicine, or if the eruption be not cured by the above applications, an emetic, or a course of medicine will be the surest means of effecting a cure. An occasional dose of composition may be sufficient to rectify the stomach and bowels in slight cases, or, what would be still better, a dose of the composition powder, taken in a strong decoction of bayberry.

TREATMENT OF PUSTULAR TETTER.—Salt water is a good wash in this and probably in other forms of tetter. The parts should be kept covered with salve or ointment spread on soft muslin or linen, and not exposed to the air except when necessary to wash and apply new dressings. Tetter may be found difficult to cure, unless protected from the air, and kept dry.

The constitutional treatment should be the same as in the former variety. In fine, there is no form of the disease in which the general Thomsonian remedies, such as composition, spice bitters, bayberry, or No. 3, &c., may not be used with advantage. Warm clothing, exercise in the open air, cleanliness, and a well regulated diet, are of importance in all chronic diseases.

TREATMENT OF EATING OR CORRODING TETTER.—This variety of tetter demands a more active course of treatment, especially where there is a tendency in the disease to spread rapidly. A full course of medicine should be given and followed by the usual stimulants and astringents, such as composition, ginger, capsicum and bayberry, in order to promote perspiration, and to correct the secretions of the stomach and bowels.

The yeast poultice, or a compound of white pond lilly, elm and ginger, wet with a strong tea of raspberry leaves, to be applied to the parts affected, and renewed at proper intervals until the ulcers assume a healthy appearance, when the salve or ointment may be used as recommended in pustular tetter.

There are various forms of eruptions of the nature of tetter, all of which should be treated on the same general principles.

In some instances tetter will spread over a considerable portion of the lower extremities, and sometimes over almost the whole of the body. A patient applied to me not long since, who had tetter over the whole surface of both legs, and the flesh was hard and swollen. The patient had been unable to sleep in bed for many

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months, on account of the tormenting itching, which came on at night, when covered in bed.

The treatment, in such cases, should be to regulate the general health by the vapor bath and emetics; together with the continued use of the compound lobelia pills, composition and spice bitters, and apply poultices made of elm, white pond lilly, and ginger; and after the parts run, and the swelling subsides, some simple salve may be applied; and cover the parts with silk oil cloth, in order to exclude the air. When it is necessary to cleanse the parts, the oil cloth must be again reapplied, and not permanently removed until the disease is entirely cured.

### ITCH.

#### SECTION XVI.

This disease, it is said, is caused by an insect which penetrates the skin, and produces small vesicles or pustules, forming into scabs, and attended with an intolerable itching.

The wrists, and between the fingers, are the parts affected, though occasionally it is observed on other joints, and on various parts of the body, excepting the face.

TREATMENT.—The sulphur ointment will cure the real itch, sooner, probably, than any other application. There are other remedies, which may be used with benefit, as frequently washing with salt water, or the preparation recommended by Dr. Thomson, which is spirits of turpentine, with about four times as much No. 6; to be well shaken before applied.

SULPHUR OINTMENT is made by rubbing together one ounce of the flour of sulphur, and four ounces of lard. This ointment is to be applied every night. It is recommended that a part of the body only be covered with the ointment at a time, say one-fourth. The addition of a few drops of the oil of lemon will conceal the disagreeable smell of the ointment.

# RING-WORM.

#### SECTION XVII.

This name is applied to an eruption consisting of very minute vesicles, or blisters, closely compacted together, and which form a ring or circle. There is a great diversity in the size of the ring, varying from an eighth of an inch to two or three inches in diameter. In the centre of the larger rings, the skin is of its natural appearance. "The eruption is always attended with a troublesome itching and tingling sensation." In four or five days the vesicles break, and form their crusts or scabs, which, in general, fall off by the eighth or ninth day. In some instances, new circles of the eruption appear in succession for several weeks.

TREATMENT.—Ring-worm may be readily cured in most instances, by washing the part with the tincture of lobelia, or the No. 6, and applying an ointment made of the narrow leaf dock root, grated and stewed in lard. The meadow-fern ointment is also

a good application.

When the eruption proves obstinate under the above local application, it will be proper to use constitutional treatment. A dose of composition or spice bitters two or three times a day, or take a teacup half full of bayberry tea, and stir in it a teaspoonful of composition powder; sweeten, and take night and morning. Lime water in milk answers a good purpose, taken two or three times a day. A course of medicine, however, is the most effectual means of cleansing the system of all morbid humors.

An entire exclusion of air from ring-worm will mostly effect a cure in slight cases.

### CHAFING IN CHILDREN.

#### SECTION XVIII.

Fat children are liable to chafe about the neck, and other parts, where the skin of different parts comes in contact.

TREATMENT.—Apply scorched flour, or interpose a piece of muslin or linen, slightly scorched, to absord the secretion of the skin, which cause the excoriations.

Where the buttocks become excoriated, or break out in sores from an acrid condition of the stool, apply some soothing liniment as a mixture of lime water and sweet oil, and correct the sceretions of the bowels by injections; and if the stomach be disordered, give an emetic. The chalk mixture, or lime water, may be used with advantage, in correcting the acrid state of the secretions of the stomach and bowels.

### PRICKLEY HEAT.

### SECTION XIX.

Prickley Heat, as it is called, is caused by impurities in the blood, being thrown to the surface. Children are most liable to this eruption in very warm weather, and during the period of teething. Derangement in the digestive powers are in almost every instance, the original cause of the complaint. The eruption is mostly confined to the neck, breast and shoulders.

TREATMENT.—A few doses of lime water, together with the use of the tineture of lobelia, in small quantities, merely sufficient to produce slight nausea, will, in general correct the derangement in

the stomach and bowels. But the eruption will continue in many cases until the teeth are through the gums, and the irritation has subsided.

LOCAL APPLICATION.—Bayberry or sumac tea made very strong will allay the itching, adding a teaspoonful of the tincture of lobelia, to an equal quantity of the bayberry tea, frequently applied will cure the eruption.

It sometimes happens that the eruption strikes in suddenly and the child becomes very sick, in which case an emetic of lobelia in composition tea, will be proper, and injections administered prepared in the same manner as the emetic.

# DISEASE OF THE CHEST AND LUNGS.

#### SECTION XX.

Bronchitis.—The name bronchitis is applied to a disease of the lining membrane of the air vessels of the lungs and throat. It is a form of disease of very common occurrence, and is usually called catarrh or cold, either of which is a more appropriate term than bronchitis, which means an inflammation of the bronchial vessels, whereas the disease is not necessarily accompanied with inflammation, neither is it confined to the bronchial vessels.

Symptoms.—This disease is greatly diversified, both in character and symptoms. Generally there is, in the first place, great lassitude, chilliness, loss of appetite, much oppression at the chest, the skin cold, the face pale, and the head heavy. The breathing becomes more or less short, and sometimes difficult. The cough is mostly slight at first, consisting of a mere hack, and, in some instances, dry; or the expectoration, in the commencement, is frothy or clear, and tough, like the white of an egg. In some instances there is no pain; in other cases, constant pain; and

sometimes pain is only felt during the act of coughing. In most cases of bronchitis, there is more or less fever in the after part of the day, and a paroxysm of coughing comes on at night. There is langour, headache, and dryness of the skin, and in some few cases, profuse perspiration. There is usually more or less hoarseness, and a wheezing, or rattling breathing.

In the young and plethoric, a strong reaction comes on early in the disease: the pulse is high; the countenance becomes flushed, and the breathing hurried. Whereas, in the aged and feeble, there is seldom much inflammation or fever, as the system is not able to establish and support an inflammatory action.!

"Infants are especially liable to this form of disease. In them the disease manifests itself by a short, quick, oppressed, and wheezing respiration; uneasiness on being placed in the recumbent position; slight congh, somewhat hourse at first, but humid and rattling as the disease advances; a uniformly pale, and anxious countenance, pulse frequent and tense; skin above the natural temperature on the trunk, but the hands and feet are commonly cool, or at the regular temperature."

The disease, however, presents many grades of violence, both in the young and old. Sometimes the vital powers are in a sunken condition—there is low delirium, cold skin, weak pulse, blueness under the nails, and stupor.

Sometimes there are paroxysms of difficult breathing, resembling that of asthma.

CAUSE.—Cold and moisture operating upon debilitated frames. The disease occurring mostly in old persons and in weakly children.

FAVORABLE SIGNS.—Improvement in respiration, an easy expectoration of a thick yellow matter, and more especially when the secretions of the *nose* are restored; the stools of a natural color: and a general warmth and moisture of the skin.

Unfavorable Symptoms.—Great distress and oppression, cold skin; little expectoration and ropy, like the whites of eggs; tendency to stupor or delirium; and a dry nose. These symptoms, most of which frequently attend the early stage, are not to be considered alarming, unless where they continue to exist in a later period of the disease.

Distinguishing feature between Catarrh and Bronchitis.—Catarrh commences in the nose, and travels down, sometimes not reaching the lungs. Bronchitis begins in the lungs, and proceeds up.

TREATMENT.—Slight attacks of the disease, in general, require nothing more than an occasional dose of the composition or pepper tea, with broken doses of lobelia; the use of a warm foot bath, and a strict attention to diet, and keeping the feet warm.

When the symptoms are more distressing, emetics will be proper; a full course of medicine is best in severe cases. The functions of the skin will be greatly assisted by the warm water bath, or vapor bath.

EXPECTORANTS.—In the early stage of the disease, or as long as the cough is hard and dry, or the expectoration resembles the white of an egg, the patient should be kept slightly nauseated with lobelia, given in broken doses, either in the form of pills, tincture, or infusion. There are other articles which may be used to ease the cough, and promote expectoration, such as a tea of bran, flaxseed, elm, or liquorice root, acidulated with lemon juice, and sweetened with honey or rock candy; equal parts of olive oil, vinegar, and honey, stewed together, and taken frequently, in teaspoonful doses; onions or garlic sliced and covered with sugar, and kept moderately warm, form a syrup which answers a good purpose, more especially in patients of weak nerves. Carbonate of ammonia, given in hot wine whey, will afford great relief in cases of extreme oppression of breathing. When the bowels are costive, injections should be used. Lobelia administered in this way, in simple luke-warm water, sometimes excites an almost magic influence in equalizing the circulation, and counteracting the undue determination of blood to the lungs. The system kept under the influence of lobelia, the expectoration soon assumes a favorable aspect, except in very stubborn cases.

The Diet, in the early stage of the disease, should consist of light food, as barley water, tapioca, rice, sago, crust coffee, elm gruel, milk porridge, &c. The expectoration becoming copious and yellow, with other favorable symptoms, the patient may be

allowed a more strengthening diet, as fresh beef, mutton, soft boiled eggs, stale bread, &c.

The expectoration presenting a favorable appearance, and the secretions of the nose restored, the quantity of lobelia may be lessened, and three or four times a day the patient should take a teacup half full of strong bayberry or No. 3 tea, adding a teaspoonful of composition powder, or half a teaspoonful of capsicum to the tea, or the composition or pepper may be taken in the usual way. The spice bitters may be used as a substitute for the composition.

An occasional emetic, or full course of medicine, will be proper at any stage of the complaint. Where the symptoms are violent, or the disease becomes protracted, a course of medicine will prove the most effectual.

Balsam Copaiva is a valuable remedy in protracted cases of catarrh or bronchitis. The dose, for an adult, is from fifteen to twenty drops three times a day. It may be dropped on sugar, or rubbed up with a small portion of slippery elm powder and sugar, adding a few drops of some agreeable essence, and sufficient water to make it convenient to take. The modern plan of preparing the balsam in capsules, is a still better form for taking.

The TINCTURE OF MYRRH, or Thomson's No. 6, may be used with benefit, more especially in the latter stage of the disease, and where the patient is affected with flatulency, or oppression at the stomach after meals, which is a proper time for taking it.

NIGHT SWEATS.—From the debility usually induced in protracted cases of bronchitis, night sweats are apt to occur. Under these circumstances, the medicine at bed time should consist of a strong tea of the bayberry or No. 3, and in the morning, the surface bathed with No. 6 or pepper sauce, avoiding exposure to cold air. The clothing to be put on perfectly dry. A flannel garment wet with salt and vinegar, dried and worn next the skin, is recommended by some experienced physicians to check night sweats. The vapor bath I have found of benefit in preventing night sweats in some cases. Depending, however, upon debility, it will be difficult, in many instances, to prevent night sweats until the system gains additional strength.

#### CHRONIC BRONCHITIS.

From repeated colds, unwholesome air, and improper diet; bad treatment, such as bleeding and active purging, confirmed dyspepsia, or other constitutional disorders; bronchitis is liable to become protracted for many weeks, or even many months, and to become a seated complaint. It then receives the name of chronic bronchitis.

To describe all the various modifications of symptoms which attend chronic bronchitis, would be a task difficult to perform, and of but little practical utility. The disease appears in every grade of violence, from a slight affection, to that of a deeply confirmed, and sometimes incurable disease. A majority of the cases of consumption arise from neglected, or badly treated catarrh, or bronchitis. Clergymen are extremely liable to an affection of the throat which is usually called bronchitis, or the clergyman's sore throat.

Symptoms in a well-marked case of Chronic Bronchitis.—A troublesome cough, and free expectoration; general debility and wasting of the flesh; short, oppressed, and wheezing respiration; paleness of the countenance, and blueness of the lips; chilliness in the early part of the day, followed by more or less heetic fever night sweats, and extreme sensibility to cold; loss of appetite, with tenderness and distress at the pit of the stomach; and an unhealthy condition of the stools; more or less pain in the side or chest, particularly on coughing; and an inability to lie on one side.

The symptoms, however, in chronic bronchitis vary accordingly as the character and circumstances of the case differ. Thus, whilst in some cases the cough is frequent and harrassing, in others there is but little cough or raising, except in the morning. Night sweats and hectic fever, though common, do not always attend the complaint. The degree of derangement of the digestive powers varies greatly in different cases, and exerts a powerful influence over other important functions. In fine, it is upon the integrity of the stomach that, in a great degree, depends the cure of the disease in the lungs and throat.

Stone and glass cutters are peculiarly subject to affections of the air vessels of the lungs, from mechanical irritation kept up by inhaling particles of dust.

TREATMENT.—To correct the disordered stomach, promote digestion, and supply the lungs with fresh wholesome air, are especially indicated in the cure of chronic bronchitis.

Thomson's Course of Medicine is the most effectual means for cleansing the stomach and bowels; it also promotes the healthy functions of the skin, and the mucous membrane of the bronchial vessels. The course of medicine should be given as the circumstances of the case require. A very good rule to be observed is, that so long as the patient has an appetite, and is getting better, to omit the course. Morning is the best time for giving a course of medicine in chronic diseases. The skin should be bathed with some stimulant after the last bath in the course. An emetic in the morning before rising, the patient previously drinking some composition tea, will answer, in many instances, the place of a full course. The lobelia emetic to be prepared in bayberry or No. 3 tea. The simple No. 3 tea made strong, will sometimes operate as an emetic, and afford much relief to the patient.

From three to five of the No. 3 pills should be taken before meals, except when using Peruvian bark, or elixir of vitrol. The Peruvian bark, columbo, Virginia snake root, wild cherry bark, gentian, spice bitters, Thomson's No. 4 bitters, should be given either singly or combined, where there is much debility and night sweats, and not confine the patient to a particular kind, but keep changing. I have used the *elixir of vitrol* with decided benefit, in cases of night sweats; from fifteen to twenty drops may be given in a wineglass of a tea of Peruvian bark, or of some other tonic, and repeated three or four times a day. The bayberry or No. 3 should not be used at the time of using the Peruvian bark or elixir of vitrol.

FRESH AIR.—In chronic bronchitis the patient should use moderate exercise in the open air as much as possible, with particular attention to keep the body and feet protected from the cold. There is an instrument recently introduced into use called a respiratory, by wearing which the patient can go out in severe

cold weather, and experience no inconvenience in the lungs from the cold. Recoveries from this disease are greatly facilitated by fresh air.

A change of residence, more particularly to a *pine* country, or to the sea board, provided salt air agrees with the patient, will, in many instances, prove of signal benefit.

Vegetable Balsams.—These are sometimes found of especial

VEGETABLE BALSAMS.—These are sometimes found of especial benefit in cases of chronic disease of the bronchial mucous membrane. The balsam copavia, balsam tolu, and Canada balsam, are those generally employed. The balsam copavia is considered the best; to be given at first in doses of from twenty to thirty drops, gradually increasing the quantity to fifty or sixty drops, and repeated three or four times a day. (The dose and mode of preparing the other balsams will be found in the Materia Medica.)

The bayberry and No. 3 in strong decoction, and adding a tea-spoonful of No. 6, or a small portion of pepper, should be given as often as once a day, where the tongue is coated. A very good mode of taking the bayberry is by rubbing the powder up with honey, and then adding a portion of luke-warm water, or, what is better, a tea of aspin, poplar, or some other tonic. Powder taken without being scalded, will, in many instances, make more impression upon the stomach than when taken in decoction. The No. 3 pills may be used in place of the above preparations, if the patient be averse to liquids.

The *purified charcoal* may be used with advantage where the bowels are costive.

Inhaling the smoke of cayenne pepper, though a harsh remedy, has in many instances been attended with the most signal benefit. It is applicable to cases of long standing. The proper mode of doing it is to put a small portion of cayenne pepper on a red hot shovel, the patient being covered with a blanket, to confine the smoke; or let the patient breathe the smoke whilst in a vapor bath. I recently met with a gentleman from Massachusetts who had been affected with a harrassing cough, which continued for many months without any abatement, although he had been under treatment in a Thomsonian infirmary. At length resorting to the inhaling of pepper smoke, his cough was cured in a few days.

This gentleman described the effect of the smoke upon the lungs to be at first almost suffocating, and very distressing, but in a short time the sense of suffocation passed off, perspiration became profuse, and the secretions from the eyes, nose, and mouth ran copiously during the operation. The secretions from the lungs, in a few hours after the first operation, changed their aspect, and were raised easily, and the mucous membrane was speedily restored to a healthy condition.

Inhaling the fumes of tar is in some cases of benefit in restoring a healthy action to the mucous membrane of the lungs and windpipe. Patients have also been cured of chronic bronchitis by being exposed to the influence of oak bark dust.

THE EXTERNAL APPLICATIONS proper for the chest are stimulating liniments, mustard poultices or plasters, or strengthening plasters. Cayenne pepper strewed on the plaster will often render it more efficient.

DIET.—The most nourishing kinds of food should be used, as eggs, custards, stale wheat bread, and all kinds of wholesome articles that may suit the stomach. Meats, are allowable, unless they be found to disagree with the stomach, avoiding veal, fresh pork, sausages, and all food fried in fat. A milk diet generally agrees with the patient, such as porridge, rice and milk, boiled milk and toast. Where the bowels are costive, a gruel made of unbolted wheat flour, or bread made of the same article, should be used.

# PULMONARY CONSUMPTION.

#### SECTION XXI.

The lungs are liable to various forms of disease, producing different varieties of consumption.

OF THE PRINCIPAL VARIETIES OF CONSUMPTION.

1st. Tubercular Consumption.—This variety of cunsumption commences with the formation of small roundish bodies (called tubercles) throughout the lungs; and as they increase in size, and suppurate, that part in which suppuration takes place is destroyed, or its structure changed and rendered incapable of performing its natural function.

Tubercles, in the first place, are about the size of a millet seed, and generally are found in clusters or masses. There can be no doubt but that tubercles exist in the lungs of some persons for many years without increasing in size, or causing any considerable inconvenience to the patient.

Tubercular consumption prevails to a great extent in the United States and Great Britain, and is of all the varieties of consumption the most difficult to cure. This form of consumption occurs, almost exclusively, in scrofulous constitutions, or in persons of an hereditary tendency to tubercles. There are few cases of this form of consumption that commence in persons rising forty years old, the disease almost exclusively occurring between the age of fifteen and thirty.

The Causes which usually bring on tubercular consumption in constitutions predisposed to the disease, are, repeated colds, or catarrhs; disordered stomach and bowels; sudden check of perspiration after exhausting exercise; the introduction of antimony or mercury into the system; \* the intemperate use of spiritous liquors; copious bleeding; excessive venereal indulgence; con-

<sup>\*</sup> Tubercules have been produced in the lungs of animals by giving them mercury, by way of experiment.

finement in ill-ventilated apartments; and unwholesome tood. If one or both parents be predisposed to scrofula, or tubercular consumption, all their children will be liable to pulmonary consumption; whilst in other instances, this hereditary disposition will exist in some of the children only; the rest being entirely exempt from it. Children are more apt to partake of the constitution of the mother than that of the father. There are instances, however, where both parents have been consumptive, and all their children robust and healthy; and then, again, both parents may be healthy, and their children delicate and consumptive.

Symptoms.—Tubercular consumption commences with a short, dry cough, which may continue for many months without expectoration, except of small portions of glary mucous. The breathing short and oppressed, with a sense of tightness or uneasiness in some portion of the breast whilst taking a full inspiration. There is much debility, and a gradual wasting of the flesh; the appetite fails and the digestion is impaired, and the patient is very liable to have a catarrh on the slightest exposure to cold or damp air.

As the disease progresses emaciation and debility increase; the cough becomes more harrassing, and the breathing shorter and more oppressed; night sweats occur, which leave the patient in an extremely languid condition. There is a chilliness in the fore part of the day, followed by a flush on one or both cheeks, and a burning in the palms of the hands and soles of the feet. The tongue is usually coated with a thin white fur, or sometimes clean and of a pale pink color.

Sooner or later in the disease the tuberculous masses become softened into the consistency of pus, and portions of the suppurated matter are discharged into the air vessels, and coughed up in the form of a thick yellow-like or greenish matter, assuming the character of genuine pus, and frequently streaked with blood. When this change in the character of the expectoration occurs, the cough, in some instances, becomes less distressing, but the general weakness increases, the flesh continues to waste, night sweats become more profuse, and usually there is a slight chill in the morning and towards evening. After the evening chill, hectic fever comes on, during which the pulse is seldom less than 120

per minute. In the absence of fever the pulse is soft, languid and weak. As the disease advances, the expression of the countenance becomes changed, the eyes assume a pearly whiteness; the voice becomes weak and hoarse, or hollow; the feet swell, and a diarrhæa comes on, accompanied with rapid exhaustion; the mind is in many instances free from depression; and but little impaired until near the termination of the disease, when there is apt to be some degree of delirium, and "occasionally total imbecility about a week previous to death."

OF OTHER MODIFICATIONS OF SYMPTOMS.—In some instances tubercular consumption runs its course with scarcely any prominent symptom of disease in the lungs, there being no pain or difficulty of breathing, and but little cough or expectoration. There is a general wasting of the flesh; night sweats, failing of the appetite, the countenance is pale, and the flesh soft and flabby. Frequently, in these cases, there is more or less blood raised, and sometimes the lungs bleed freely. As the disease advances, however, the cough becomes more troublesome, with frequent inclination to vomit, and a rapid wasting of flesh and strength. The bowels are generally either much constipated, or relaxed; the nose becomes pointed and cold, the lips pallid and bluish, and the expression of the countenance is changed.

2D. Bronchial Consumption.—A variety of consumption which probably occurs next in frequency to the one just described, is seated in the mucous membrane of the air passages of the lungs and wind-pipe. *Chronic bronchitis* is the term usually applied to this form of disease, and which from old age, bad digestion, neglect or improper treatment, is apt to terminate in confirmed consumption. This form of disease is mostly confined to children, and to the aged. The general character, symptoms, and treatment, are described under the head of *chronic bronchitis*. The great majority of the cured cases of consumption have been of this variety.

In some instances chronic brochitis accompanies tuberculous consumption, the two forms of disease being blended.

3D. Consumption consequent on Pleurisy.—From bad treatment, or under unfavorable circumstances, pleurisy is occasionally sig. R.

followed by the formation of an abscess in the chest, which is apt to produce ulceration of the lungs, and thus cause pulmonary consumption.

The symptoms which characterize abscess in the chest, are cough and difficulty of respiration; a sense of oppression or load in the chest on lying down; more or less pain and tenderness to pressure in the affected side, and above all, a dull sound given by percussion on the chest. These symptoms, together with the previous existence of pleurisy, will serve to distinguish the disease.

Sometimes the abscess ulcerates through the lungs into the air vessels, and is discharged by coughing. There are night sweats, hectic fever, and wasting of flesh and strength. After the abscess is in this way discharged, the patient may experience a mitigation of his sufferings, and occasionally there are recoveries; but more frequently the disease terminates fatally, and sometimes death suddenly takes place.

4TH. THROAT CONSUMPTION.—This variety of consumption consists of ulceration of the throat and wind-pipe. It is usually rapid in its course, and when fully scated before proper treatment is applied, it is mostly fatal.

Cause.—Throat consumption is generally brought on by the neglect of repeated colds. Sometimes it follows measles and whooping-cough.

Symptoms.—In the first place there is derangement of the general health, such as want of appetite, feeble digestion, cold and torpid bowels, a diminished temperature of the body, and extreme sensibility to cold. There is uneasiness and pain in the wind-pipe, which is increased by coughing; the patient frequently puts his hand to the throat, in consequence of the uneasy sensation in that part. The voice sooner or later becomes changed to a hoarse and feeble whisper. More or less pain is experienced in the throat on "bending the head backwards, or turning it round." The cough is apt to be severe in the morning, and is almost always brought on by attempting to swallow. The expectoration is slight, in some instances, and in others it is copious.

When the disease is fully established, the countenance becomes pale, and the skin sallow; the flesh wastes rapidly, with chilliness

followed by hectic fever towards evening, and profuse sweating during sleep; the mind is dejected and irritable, and there is a haggared expression of countenance.

There are cases in which the voice becomes indistinct, or entirely lost, in catarrhal affections, and the patient continues to enjoy good health.

TREATMENT OF CONSUMPTION.—In tubercular consumption, even Thomsonian treatment, unless applied very early in the complaint, and under favorable circumstances, will seldom effect more than a mitigation of the symptoms, and in some degree checks the progress of the disease. There can be no doubt, however, that in some instances where tubercles exist in the lungs, that by strict attention to the preservation of the general health, and a judicious use of medicine, when required, that these tubercles may continue for many years without being farther developed, and even permit the patient to live to an old age.

The general indications of treatment are, to correct the stomach and bowels with an occasional course of medicine; to promote the secretions by a continued use of lobelia in broken doses; to sustain the circulation, and maintain a determination to the surface by the use of pure stimulants, such as capsicum and composition, assisted by an occasional vapor bath; together with frictions on the surface with the flesh brush, horse-hair mits, or salted towel; stimulants to the skin, as pepper sauce, or stimulating ointments, and warming plasters on the breast, or between the shoulders.

Fresh Air.—In the early stage of consumption the patient should seek the open air as much as possible, or at least should avoid small and tight rooms. Where a stove is used to warm a room, there should be a basin of water kept on it constantly, to prevent too much dryness. In severely cold weather, patients may take the air, wearing over the mouth the instrument called a respirator, which being kept warm by the breath, increases the temperature of the air that passes inwardly, and thus renders it more suitable for weak lungs.

RAMADGE'S TUBE.—Of the utility of this instrument in the cure of consumption, I cannot speak from my own experience or obser-

vation, the practice having been but recently introduced. But from the testimony of those who have made repeated trials of it, I cannot doubt of its utility in the early stage of tubercular consumption, and more especially as a means of preventing consumption in those who are predisposed to the disease.

The Rev. Mr. Howe, who first introduced this tube into use in this country, asserts that the use of the instrument a few months will occasion so great an expansion of the chest and lungs, as to enable the patient to take in double the quantity of air than before using it. If its effects be such as are here stated, it will constitute at least one of the surest means of preventing tubercular consumption.

The construction of the Ramadge tube is such as to admit only a very small quantity of air at once, which occasions the patient to use considerable effort in order to get a supply of air to the lungs. The breath is then to be forced out through the tube, which again requires extra exertion on the part of the muscles of the chest; and the retention of the air in the lungs, it is said, will occasion the gradual enlargement of them. The use of this tube would be injurious in the latter stage of consumption, or where the heart is diseased.

Tubercular consumption is generally incurable, yet there are instances in which, after the tubercular matter is discharged, the cavity in the lungs become cicatrized, and the patient is restored to health.

TREATMENT OF BRONCHIAL CONSUMPTION.—The character and symptoms of this form of disease are described under the head of chronic bronchitis. A vast majority of the cured cases of consumption have been of this variety,—the disease being seated in the mucous membrane of the bronchial vessels. This disease, though greatly under the control of medical treatment, under unfavorable circumstances may prove incurable. Thus when it occurs in persons far advanced in life, or when the constitution is vitiated by intemperance.

Confinement in the foul air of ill-ventilated apartments, an unwholesome diet, and frequent careless exposure of the feet to dampness, are also unfavorable to the cure of the disease.

The course of treatment laid down for chronic bronchitis will be proper in this variety of consumption, the latter being an aggravated or long continued disease of the mucous membrane of the bronchial vessels.

The course of medicine must be repeated at proper intervals, as the symptoms demand. Preparations of lobelia—the tincture or pills—taken in small doses, and repeated several times a day. Where the expectoration is profuse, bitters should be taken to assist digestion and sustain the strength, and not confine the patient to any one preparation of tonics, but occasionally change them.

The No. 3 pills should be taken at bed time, in the place of a decoction of bayberry, where there are night sweats. In case liquids oppress the patient, all medicines may be given in the form of pills. Quinine is a good tonic, and is very readily made into pills; the No. 3 pills form a substitute for the bayberry tea; and the lobelia and capsicum may also be given in pills. It must be recollected that the No. 3 pills and quinine should not be given at the same time; one of them, however, may be used in the forenoon, and the other in the evening. The conserve of hollyhock may be used as a mild stimulant, tonic and expectorant.

Inhaling the smoke of burning pepper, unless the case be very deeply seated, promises much in the cure of this form of consumption.

For directions in relation to diet and regimen, and the use of balsamic and other remedies, the reader is referred to the treatment of chronic bronchitis.

In Consumption from Chronic Pleurist, the same general plan of treatment should be adopted as in the former varieties—namely, to cleanse the stomach and bowels, and promote a healthy action of the general system by an occasional course of medicine; broken doses of lobelia as an expectorant, and also to lessen morbid excitement; the No. 3 pills, or a strong decoction of bayberry once or twice a day, to prevent the accumulation of morbid secretions on the mucous coat of the stomach; the vapor bath to promote the action of the skin, and assist in equalizing the circulation; stimulants and tonics to restore and sustain the digestive

and nutritive functions; and injections to relieve the bowels when required. In this form of consumption, or where there is evidence of an abscess in the chest, to inhale the pepper smoke would be of doubtful utility.

THROAT CONSUMPTION requires a plan of treatment similar to that required in chronic bronchitis.

Persons experienced in sounding the chest with the stetherscope, and by percussion, may sometimes form, by these means, a pretty accurate judgment of the character and extent of disease of the lungs. As this method, however, requires long experience and much tact, in order to distinguish by it the character of the disease, it will be useless to recommend it in a family work, more especially as it is of no utility in the cure.

As the same general or constitutional treatment may be applied with safety to all diseases of the chest, any anxiety on the part of the patient, or friends, or practitioner, respecting the peculiar forms which these diseases may assume, may be dispensed with, and these general directions with regard to the treatment persisted in. Even diseases of the heart have been cured by Thomsonian courses of medicine, with proper attention to diet and regimen.

# ASTHMA, OR PHTHISIC.

### SECTION XXII.

Asthma is a disease of the organs of respiration, generally occurring in fits, or paroxysms.

In some persons, the *predisposition* to asthma is induced. In others it is *hereditary*, beginning its attacks in childhood, and occurring at intervals through the whole course of a long life. Sometimes children will be affected with phthisic for a few years, and as they advance in age become entirely free from its attacks, although asthma may occur at any age, still those who are past the meridian of life are most liable to it.

The season of the year in which asthma occurs varies in different individuals. Thus whilst in some the attacks are principally confined to cold and damp weather, others are only liable to it during mid-summer. Others, again, may have it during any season.

CAUSES.—Asthma is in general a disease of enervation,—a deficiency of the nervous power which governs the function of respiration. Hence it may be brought on in a posson predisposed to the disease, by any cause which tends to weaken or impair the nervous influence, such as exposure to cold and dampness, inaccuracies in diet, over exercise or fatigue, venerial excesses, and certain electric conditions of the atmosphere. The disease, in the great majority of instances, is associated with feebleness of digestion. Absence of day-light depresses the nervous powers, and this will explain the cause why the disease generally comes on at night, and subsides on the approach of Zay-light.

Asthma, in some instances, arises from organic disease of the heart. In other instances, a mere functional derangement of the circulating organs, will occasion an attack; and on the other hand, an attack of asthma will be attended by palpitations of the heart, which entirely subside as the paroxysm of asthma passes off. Asthma may be considered in general as a secondary affection, the primary seat of the disease being in the stomach.

NOT A FATAL DISEASE.—Asthma seldom proves fatal, though in some cases it is extremely difficult to cure. When connected with organic disease of the heart, it may prove fatal at any time.

Symptoms.—Asthma is characterized by a sense of tightness across the chest, great difficulty of breathing, and a distressing sense of suffocation. It is seldom accompanied by fever.

An attack of this disease is generally preceded by a sense of weight and fulness at the pit of the stomach, and eructations, heartburn, flatulency, weight over the eyes, and itching of the skin. When the paroxysm comes on during sleep, the patient is apt to have frightful dreams, and to wake up in great distress, with a sense of tightness through the breast, great difficulty of breathing, and a short dry cough. "These symptoms soon acquire a most appalling degree of violence. The breathing becomes

wheezing, extremely laborious, gasping and suffocative; the countenance is expressive of intense anxiety and distress, and the heart usually palpitates violently. The desire for fresh air in very violent cases, is inexpressibly urgent; the patient insists on the doors and windows being thrown open: and is totally unable to remain in a recumbent posture. The extremities are generally cold and the skin moist and clammy; the face is bloated and livid, or pale, and the veins of the neck hard and turgid. After these symptoms have continued for an indefinite time, the breathing becomes less laborious and anxious, and towards morning a copious expectoration of viscid mucous generally ensues, which always brings with it considerable relief. During the ensuing day the patient usually feels but little oppression or uneasiness in the chest. the next night, however, the paroxysm of suffocative respiration returns; and in this way the disease proceeds, with remissions by day and exacerbations by night for three or four days in succession, and in some instances much longer, before it finally subsides."

Paroxysms of asthma may occur at any period of the day or night, though they usually come after midnight. In some instances they continue without any complete intermissions of the difficult breathing, for several days or even weeks, but always worse at night.

TREATMENT OF ASTHMA.—In many instances, where the attack is slight, the tincture of lobelia given in composition or pepper tea, and placing the feet in warm mustard water, will be sufficient to afford great relief, and sometimes will overcome the symptoms.

THE VAPOR BATH.—I have found the vapor bath not only to assist in breaking up paroxysms of asthma, but in many cases almost indispensable, as the emetic in some instances will not operate previously to the vapor bath being administered.

THE HOT AIR BATH FROM BURNING ALCOHOL.—When the skin is cool and inclined to moisture, the hot air bath will answer as well and be attended with much less trouble than the steam bath, more especially in hot weather, when fire is not required in sick rooms.

The stimulating liniment, pepper sauce, or No. 6, should be ap-

plied over the surface after the bath. Previously to applying the stimulant to the surface, let the patient be showered, or washed over with spirits or vinegar, and then rubbed dry.

EMETICS.—These are the most effectual means for the cure of asthma. To prepare an emetic infuse the brown lobelia in a strong decoction of bayberry tea, the patient having taken previously of pepper or composition tea, or let some capsicum be added to the emetic; this should be taken in the usual doses and repeated as often as necessary. The more the patient becomes relaxed the greater in general will be the relief. In place of the above compound, the liquid of the third preparation of lobelia may be used for the emetic, or a combination of the lobelia powder with the third preparation.

A Course of Medicine given in the evening, or before the time the asthma comes on, or as soon as the first symptoms arise indicating its approach, will in general, keep off the paroxysm, or at least greatly moderate its violence. The tincture of lobelia will often fail in bad cases of making sufficient impression on the stomach; but the brown powder or the third preparation I never knew to fail in relieving the most severe paroxysms of asthma.

INJECTIONS are important in the treatment of asthma, and in some instances will afford instant relief. Lobelia administered in this way and retained, will relax the system as effectually as when taken into the stomach, and generally will excite free vomiting.

THE SKUNK CABBAGE answers a good purpose in many cases of asthma, though in general far inferior to lobelia.

TREATMENT DURING THE REMISSION OR INTERVAL BETWEEN THE PAROXYSMS.—Broken doses of lobelia, either in tincture or the compound lobelia pills, together with an occasional dose of composition or pepper, will often be sufficient. Where the disease becomes protracted, however, and the system is in a feeble condition, tonics will be useful. Bonesett tea, taken cold, I have found to be decidedly useful in some cases. The scutilaria or scull cap, may be used as a tonic, and answers as a nervine.

English Garlic operates as a stimulant on the nervous system, and is therefore well adapted to cases of asthma, more especially where the disease being protracted, requires occasionally a change

in the medicine. Let the patient chew and swallow a clove of the garlic every morning before breakfast.

Stimulating application to the surface. — In asthma the skin is usually below its natural temperature, and inclined to moisture. Where this condition of the skin prevails, the stimulating liniment, the No. 6, or pepper sauce, should be applied over the surface before going to bed. A plaster of the stimulating liniment spread over a piece of bladder or silk oilcloth, and bound on the pit of the stomach, will have a tendency to prevent the occurrence of the paroxysm. The same application may also be applied to the soles of the feet.

DIET.—The first symptoms, in many instances, on the approach of an attack of asthma, are, an unpleasant sense of weight, or stricture, and coldness at the pit of the stomach; and this frequently occurs soon after eating. The stomach not being able to digest what has been taken, is oppressed, and asthma follows as a consequence of that condition of this great central organ. As long as the patient is liable to the attacks, especial care should be observed to avoid any article of difficult digestion, more especially at the evening meal. Where the patient craves acids, the pepper sauce, or lemon juice and sugar will frequently be grateful to the stomach, and favor expectoration.

A cold shower bath every morning, by giving tone and vigor to the nervous system, will often prove especially useful in asthma, more particularly in hot weather. It may also prove a preventive to the disease. A dash of cold vinegar upon the breast will sometimes afford relief during the paroxysm, by producing reaction.

# SUMMER CATARRH, OR COLD—HAY FEVER.

#### SECTION XXIII.

There is a catarrhal affection of the mucous membrane, extending from the nose to the lungs, which comes on in warm weather, and in some persons it occurs periodically every summer. It is a disease of enervation; consisting essentially in deficiency of nervous energy.

The dust from fresh dried hay is very apt to bring on the disease in those predisposed to it, and from this circumstance it is in some places called "hay fever." Other kinds of dust, however, will have the same effect.

In some delicate persons the slightest exposure to cold or damp air, will occasion catarrh. Dr. J. K. Mitchel mentions the case of a female who would invariably be seized with a catarrh from taking hold of a tumbler of cold water.

Symptoms.—At first there are symptoms of indigestion, and a sense of fulness in the head. There is watering of the eye, and the nose discharges copiously of a thin secretion. A cough generally comes on, and expectoration resembling that which attends ordinary colds.

TREATMENT. — Tonics are particularly indicated. Colombo, gentian, Virginia snake root, bayberry, xanthoxylum, balmony, and poplar, may either or all be employed.

If the tongue be coated, or there be other symptoms of a foul stomach, a strong decoction of the bayberry should be taken as often as once a day, and if this be ineffectual, an emetic may be administered. The surface of the body should be bathed occasionally with some stimulant, as pepper sauce, or No. 6.

As a preventive use the shower bath, or sponge the body with cold water every morning for a few weeks before the time at which the disease usually comes on.

## WHOOPING-COUGH.

#### SECTION XXIV.

This disease is contagious, and occurs but once in the same individual. It is almost exclusively confined to childhood, and generally prevails as an epidemic.

This, like most contagious diseases, runs a certain course, or succession of stages, constituting its "rise, progress, and declension." In some instances, however, the disease may be cut short by medicine.

Whooping-cough is seldom fatal, except when under unfavorable circumstances, as in weak and delicate infants a few months old, or when it attacks children of scrofulous constitutions. Under these circumstances it is liable to be followed by consumption, or other forms of disease of serious character. Where the disease commences in the autumn, the cough is apt to continue until the succeeding summer.

Symptoms.—The disease commences like an ordinary cold or catarrh, with langour, sneezing, hoarseness, cough, and occasionally oppression in breathing. The bowels are costive, the appetite bad, and digestion impaired. The tongue is mostly contracted, and pointed, and of a darker color than it naturally is, and in most instances nearly clean, or very slightly coated. The cough is mostly dry during the first three weeks.

About the end of the third week the spells of coughing continue longer, they are more severe, and are attended by the peculiar sound called whooping. During the paroxysm of coughing the patient can scarcely get breath, occasioning a distressing sensation of suffocation, and the face becomes suffused with blood. The fit of coughing may last from half a minute or less, to four or five, or even ten minutes. Usually, after the third week from the commencement, there is a copious discharge of a viscid mucous, after a spell of coughing. Sometimes vomiting occurs whilst coughing,

which frequently affords great relief to the patient. In very aggravated cases, children are sometimes thrown into convulsion fits, from congestion of blood in the brain, occasioned by the violence of coughing, and the suspension of breathing, during the paroxysm.

After the expectoration continues free for a week or two, the paroxysms of coughing, in many instances, begin to decline, both in frequency and violence; whereas, in other cases the disease continues for six or eight weeks, before there is any abatement in the violence of the cough.

TREATMENT OF WHOOPING-COUGH.—Throughout the entire course of the disease the treatment should be regulated in accordance with the nature of the case. Nauseating doses of lobelia promote expectoration—generally relieve the cough—quiet restlessness, and promote the secretion of the skin. In bad cases, where the breathing is much oppressed, or the patient is very restless, an emetic will be proper. The vapor bath will assist the operation of the emetic. A course of medicine will, in some instances, cut short the disease.

Injections must be used where the bowels are costive, or otherwise disordered. Lobelia administered in this way, in luke-warm water, and retained ten or fifteen minutes, will have a decidedly beneficial effect, especially where there is an undue determination to the head and lungs. Under its influence the circulation becomes more equalized; the system becomes relaxed; and very often free vomiting is produced.

In the more advanced stage of the disease, where the secretions become profuse, attended with severe fits of coughing, which come on periodically, an emetic or an injection, as above described, administered previously to the time at which the paroxysms of coughing commonly occur, will mitigate the cough and favor the expulsion of the viscid mucous from the lungs.

COUGH MEDICINES.—Liquorice-root tea; flaxseed tea, with lemon juice; a mixture of honey with sweet oil; onion or garlic syrup, are all good for the cough. The tincture or syrup of lobelia, however, is the best expectorant, and may be used in combination with any of the above named articles.

Where convulsive fits occur, the third preparation of lobelia should be given, either alone or in bayberry tea, and injections administered. In giving lobelia as an emetic, in ordinary cases, it should be prepared in composition or bayberry tea.

Stimulants are more particularly indicated in the advanced stage of the disease, where the appetite is bad, and the system in a teeble condition. A small portion of the composition powder in a wineglass of bayberry tea, and administered once or twice a day, will cleanse the mucous membrane of the stomach, and also furnish a stimulous to the vital powers of the system.

It sometimes happens that the cough is protracted as a consequence of a want of vital power. In such cases tonics should be used, such as spice bitters, Virginia snake root, chamomile, colombo, &c.

THE COLD BATH, if the patient remain in a feeble condition, after the whooping-cough, will have a signal influence in toning the system. It is safer to commence with the tepid bath, with the water at about 90 degrees, and gradually diminish the temperature as the patient can bear it. The patient should be suddenly dipped, or showered, and immediately rubbed dry, and wrapped in a warm blanket. The proper time for administering the bath is in the morning.

Change of Air.—To move from the city to the country, or from the country to the city; or even a change of residence in the same neighborhood, will sometimes speedily cure the lingering cough and debility, which is apt to follow whooping-cough.

## PLEURISY.

### SECTION XXV.

PLECRISY is an inflammation of the membrane that lines the internal surface of the chest, which is called the pleura. This membrane also forms the *external* coating of the lungs.

Any portion of the pleura is liable to become diseased, but that on the right side is more commonly affected.

It is asserted by medical authors that pleurisy mostly attacks the robust and plethoric, but under my own observation the disease has occurred almost exclusively in the dyspeptic, the feeble, or the intemperate.

Under Thomsonian treatment, pleurisy is seldom fatal, unless complicated with extensive derangement of some important organ; or when it attacks age or debility, or vitiated constitutions.

Causes.—Exposure to wet and cold; sitting in a current of air, or in a cold room, after severe fatiguing exercise, or sleeping in damp sheets, are common causes of pleurisy. Persons are often liable to be attacked with the disease after severe surgical operations.

Symptoms.—An acute or lancinating pain in the side of the chest; hurried and painful breathing; a short dry cough, or attended with slight expectoration of a glary and almost colorless phlegm, are the symptoms which characterize pleurisy. The pulse in general is hard and frequent; the face flushed, the tongue coated; the skin dry and hot; and the urine scanty and high colored.

The symptoms, however, in this, as in other forms of disease, are modified by the various circumstances under which the disease may occur, as the age of the patient, the strength of the constitution, the extent of derangement of important organs, especially of the stomach and liver; or the degree of susceptibility of the lungs to become affected. Thus in the young and vigorous the

reaction is apt to be strong, whilst in the aged and fceble the coun' tenance may remain pale, and the pulse weak. In some cases the breathing is greatly oppressed, whilst in others there is but little oppression, and no pain. The cough, which is usually harassing, is almost wanting in some instances. The expectoration, though in general colorless in the commencement, is occasionally tinged with blood, from the first, and when the disease extends to the substance of the lungs, the expectoration is mostly copious, and consists of a ropy mucous, mixed with blood. The condition of the stomach modifies also the character of the symptoms, and influences, to a great degree, both the violence and the duration of the disease. The liver being torpid, or the flow of bile obstructed, the skin and eyes become yellow, or the countenance presents an appearance of a "sickly mixture of red and yellow."

Inflammation of the plcura is very liable to produce adhesions between the side of the chest and lung, an occurrence, however, not productive of danger, and seldom of much inconvenience. But under unfavorable circumstances, an abscess is sometimes formed, which is always attended with more or less hazard to

the patient.

FAVORABLE SIGNS.—A free expectoration of a thick yellow matter; an increased flow of urine, which on standing deposits a sediment; a general and warm perspiration, together with an abatement of the pain and oppression, indicate a favorable termination of the disease.

THE UNFAVORABLE SIGNS ARE, an increase of pain and oppression; the cough continuing dry, or the expectoration resembling a dirty mixture of blood and water; a sense of suffocation, and a sudden raising up in bed, or a "constant effort by the patient to bare the breast and to raise his head and shoulders; a weak and irregular pulse; a livid appearance of the lips and countenance; a sense of burning on the surface and coldness internally, together with a rattling in breathing, and a tendency to delirium or stupor. These symptoms though indicative of great danger, should not be considered as necessarily of fatal omen, for recoveries occasionally happen after symptoms of the most alarming character have been presented.

Slight attacks of pleurisy will, in general, require nothing more than warm teas, and small doses of lobelia, together with the vapor bath or foot bath to excite perspiration, and the patient kept warm.

When the symptoms are more violent, the patient should be kept under the influence of lobelia given in broken doses, and an occasional injection in very severe cases, composed of a teaspoonful of lobelia in tincture or powder, in luke-warm water and retained some minutes. An occasional dose of composition or a tea of bayberry and pepper should be given to assist in maintaining an equilibrium of the circulation, and to excite and correct the secretions of the stomach.

The Vapor Bath is of great advantage in pleurisy; when the patient's strength will not permit his sitting up, the vapor can be applied in bed, and in this way continued for hours if necessary.

An emetic must be given occasionally after a vapor bath, or whilst the patient is in a perspiration by other means.

A DRY HEAT should not be applied around a patient when there is much fever, as it will increase the distress, before perspiration is induced.

A WARM POULTICE applied to the side will in many instances be attended with an immediate mitigation of pain. The poultice may be made of Indian mush, well boiled; or of boiled potatoes mashed; or slippery elm and flaxseed stewed together. A portion of ginger should be added to the poultice, and when spread the surface covered with powdered lobelia. The poultice should not be allowed to get cold, but kept warm by means of a hot brick, or jug of warm water placed in contact with it.

BILIOUS PLEURISY, as it is called, usually commences with the symptoms of ordinary bilious fever. This and every other variety of pleurisy, however, must be treated upon the same general principles. In bilious pleurisy the course of medicine should be more frequently repeated than in simple pleurisy.

The during the active stage of the disease, may consist of the lightest kind of food, as elm gruel, barley water, crust coffee, arrow root, gum arabic water, or flaxseed tea, sweetened with honey. As the disease subsides the quantity of lobelia may be lessened, and the patient allowed more nourishing food, as essence of beef, boiled chicken, oysters, milk porridge, wild game, &c., with stale bread and good tea or coffee.

In some instances the treatment will require to be continued several days before an abatement of the disease be perceptible. The expectoration of a thick yellow matter is one of the first, as it is also one of the surest indications of a favorable change being about to take place.

Some medical writers state, that an increased oppression of breathing and suppression of expectoration is apt to occur in pleurisy about the fifth or sixth day.

In cases of extreme prostration, from constitutional debility, or long continuance of the disease, a free use of wine whey with five or ten grains of carbonate of ammonia added thereto, say a wineglassful of the whey, and this dose given every hour or two, as the symptoms may indicate, in connection with capsicum and Virginia snake root tea—and if the cough be dry, or the expectoration scanty, or of an unfavorable appearance, the lobelia should be used in connection with the above articles.

Tonics—Such as spice bitters, colombo, Virginia snake root, &c., are indicated where the patient remains weak after the disease has passed off. A dose of composition or bayberry tea should be taken once or twice a day during the convalescence, until the tongue becomes clean and of a healthy appearance.

## CATARRH-COMMON COLDS.

## SECTION XXVI.

CATARRH, OR COMMON COLDS, prevail to a greater extent than disease in any other form. At particular seasons, especially in the spring and winter, when south winds prevail, the majority of

persons exposed to the weather will be more or less affected with catarrh. Not only do catarrhal affections prevail more during the general thaws of spring and in open winters, but other forms of disease also prevail, to a much greater extent during those seasons when the atmosphere is chilly and charged with moisture, and damp from rain or from the thawing of frozen earth. The majority of cases of consumption originate from neglected colds, contracted during winter and spring. There is scarcely a form of disease that may not be produced by exposure to cold and dampness. Even contagious diseases, such as scarlet fever and measles, are much more common during winter and spring than at other seasons of the year; and in many instances children are taken down with a contagious disease from certain conditions of the atmosphere, without their having been exposed to any one affected with the disease.

CATARRHAL AFFECTIONS, like other forms of disease, arise from a loss of heat, and diminution of the nervous energy. When south winds prevail during spring and winter, the atmosphere is highly charged with moisture, which condenses on the walls and thus renders houses damp and unhealthy; the clothing of those exposed to the weather becomes damp, which, together with exposure of the feet to the wet ground, will almost necessarily occasion more or less disorder of the system. When the nervous energy and heat of the system is reduced, digestion is enfeebled and in proportion as the digestion is lost, will the system lose its power of generating heat. Hence "other circumstances being equal," a cold will be protracted in proportion as the digestive powers are weakened. Dr. Franklin used to say that he could bring on a cold by over eating. When the stomach is oppressed, less heat is generated in the system, and necessarily predisposes the person to take cold.

Symptoms.—Most of the symptoms attending ordinary colds, are such as usually prevail in the first stage of almost every form of disease; such as lassitude, chilliness, furred tongue, loss of appetite, torpid bowels and a dry skin. There is usually more or less cough, which is dry at first, but when the cold is on the de-

cline a free expectoration of a yellow secretion takes place. The secretions from the nose are thin and watery at first, but become thick and copious as the disease abates. Extreme soreness of the throat is very common in colds, attended with dryness of the parts, and pain on attempting to swallow. The breathing is greatly oppressed in some instances, and but slightly so in others. Generally more or less fever comes on in the after part of the day, and the patient is restless at night.

FAVORABLE SYMPTOMS.—Cleaning of the tongue; a free expectoration of thick yellowish, or cream-like mucous; the discharge of thick secretions from the nose; a tendency to perspiration, and a returning appetite, indicate a favorable and speedy termination to the cold.

TREATMENT.—Ordinary colds require nothing more than an occasional dose of composition or capsicum tea, and a strict attention to diet, and care to avoid exposure to cold or dampness.

Where patients are exposed to the open air, while engaged in their usual avocations, or to sudden changes of temperature, the hot medicine, such as capsicum and composition powder, should be taken in cold water. Taking freely of hot teas will open the pores of the skin, and may render the patient at the time, more liable to take fresh cold, if exposed to dampness, or a current of cold air. But where the patient is in bed, or not exposed to the cold air, hot teas should be taken to promote perspiration, assisted by warm applications to the feet. Simple teas of pennyroyal, dittany, or chamomile, are beneficial, and may be drank freely, to induce perspiration.

When liquids oppress the stomach, the compound lobelia pills will answer as a general medicine in all such cases.

Where the cough is hard and dry the patient must be kept slightly nauseated with lobelia, and cough mixtures employed, such as flaxseed or elm tea, with the addition of a portion of lemon juice and loaf sugar; onion syrup; bran tea; lemon juice with loaf sugar; or liquorice root tea.

For sore throat wrap a stocking around the neck on going to bed, and keep the neck warmly covered at all times. Molasses and butter melted together, adding a portion of cayenne pepper, taken at bed time, will be useful in sore throat.

When the cough continues dry and hard, and the breathing oppressed, a course of medicine ought to be given, and the same repeated at proper intervals, until the symptoms become more favorable.

Of the Consequences of Colds.—There is scarcely a form of disease that is not in the majority of instances, occasioned by "taking cold." The origin of almost ever case of pleurisy, may be traced to a loss of heat and nervous power, either from exposure to cold and dampness, or from a loss of digestion by intemperance in drinking, or overloading the stomach with food difficult of digestion; in which case the power of generating heat will be diminished in the same proportion as the stomach is oppressed, or its powers enfeebled.

In fine, the first symptoms in every acute disease, are such as indicate a loss of heat and nervous influence, and reason teaches that the treatment should be directed to restore the natural heat of the system, the loss of which occasions the disease. Whether a disease be brought on by exposure to cold and dampness, or be occasioned by an oppressed stomach, which lessens the power of generating heat, the indications for the treatment are the same. Exposure to cold and dampness, by abstracting heat and nervous power from the system, enfeebles the action of the stomach, and thus lessens the heat-producing power: the appetite becomes impaired, and the patient is affected with lassitude and chilliness; and disinclination to corporeal or mental exertion. There is general torpor of the system, and extreme sensibility to cold. And again, if the stomach be oppressed by food that it cannot digest, the heat-producing power is weakened, and the patient will experience the same symptoms as from exposure to cold. In the first instance the heat is carried off by cold and dampness, and in the latter the power of producing heat is diminished.

The effects of cold upon the system are exceedingly various: thus one whose digestion is strong may undergo long exposure to cold, but digestion being carried on vigorously, the lost heat and nervous power is soon supplied, and but little inconvenience is experienced. Whereas one of feeble digestion may become dangerously ill, by a very slight exposure. Thus, some women

will remain for hours in a cold spring house, during the hottest weather, and experience no inconvenience, whilst in others it would be followed by dangerous illness, and probably occasion death.

# DISEASE AFFECTING THE MOUTH AND THROAT.

### SECTION XXVII.

Croup—Hives.—This dangerous disease is peculiar to child-hood, usually occurring between the first and fifth year.

Croup is caused by cold, or sudden changes of weather; or it may be occasioned by a disordered stomach or bowels.

Symptoms.—The disease sometimes comes on suddenly, but generally its approach is gradual, with the usual symptoms that accompany a cold. Slight oppression of breathing, with a peculiar hoarse and shrill cough; the eyes are watery and heavy, and the child is dull and fretful. These symptoms frequently continue some days before the disease assumes a violent form. The cough becomes at length more troublesome and shrill, and agitates the child very much; the face becomes swollen and red; the breathing more difficult; the skin dry and hot, with a quick and tense pulse; and as the disease advances, the breathing becomes extremely difficult, accompanied with a hissing noise. Sometimes the cough is quite dry, and in other cases there is a copious secretion from the wind-pipe from the commencement of the disease. If the symptoms are not relieved, and the disease progress in violence, the breathing becomes still more distressing, the child manifesting by its countenance and actions the greatest degree of suffering; the head is thrown back; the eyes are half closed, and cast about with an imploring expression for relief; the face becomes pale, and covered with large drops of sweat; the lips livid; the voice becomes extinct; the extremities grow cold; slight stupor ensues; and

finally the heat and sensibility continues to diminish until the breathing ceases.

Spasmodic Croup, (as it is termed,) generally comes on suddenly, and without fever. The cough is not of that peculiar sound that generally characterizes common croup; and in some instances there is an entire absence of cough.

FREQUENTLY FATAL.—The great danger attendant on croup, arises from obstructions in the throat or wind-pipe, preventing the free admission of air to the lungs. The obstruction may consist either in the formation of a false membrane in the wind-pipe, filling up its cavity; swelling and inflammation in the epiglottis, or from spasm in the muscles of the throat. The free admission of air into the lungs being obstructed, the blood loses its vitality in proportion as the supply of air is lessened, and is thus rendered incapable of supporting life. Croup is extremely liable to terminate fatally to the patient, unless checked in its early stage by appropriate treatment.

TREATMENT.—The means to be relied upon for the cure of croup are, emetics, injections, and the vapor bath.

EMETICS.—In the early period when the symptoms are of a mild character, and the child in good health otherwise, an emetic of the tincture of lobelia may give immediate relief, and remove the disease. If this should not afford relief in a short time, say ten or fifteen minutes, the dose should be repeated at frequent intervals, and injections administered, composed of composition tea, with the addition of a teaspoonful of lobelia powder, and place the feet in warm water.

Vapor Bath.—Unless the patient be entirely relieved by the above means, the steam bath should be administered, and during the steaming, bathe the head and face with whisky, or vinegar and water, and if the patient be faint, dash cold vinegar or water on the breast. It is said that a sudden dash of cold water on the breast in croup has been found beneficial by exciting reaction, when the child had become affected with stupor.

Where the symptoms are not so urgent as to require an immediate emetic—for instance, when the child has had a cold for two or three days more or less, which begins to manifest symptoms of

approaching croup, the vapor bath must be administered, previously to the emetic, in order to insure an effectual operation.

After the bath, a prompt emetic must be given, and frequently repeated until the disease be expelled. The liquid of the third preparation of lobelia, with an equal quantity of brown lobelia, forms the most efficient emetic; to be given in bayberry or sumac tea. In very young children, the brown or green lobelia may be prepared in the above tea, or in composition tea, omitting the third preparation. The lobelia cannot be given too freely to a child in croup, and the more effectually the system becomes relaxed under its influence, the greater certainty there will be of effecting a cure.

Injections.—These should be frequently administered in croup, not only with a view to relieve the bowels, but more especially to excite an afflux of blood to the bowels, and in this way to lessen the determination to the throat. I have on several occasions observed signal benefit by the administration of an injection of a small teaspoonful of green lobelia powder in luke warm water, and retained in the bowels ten or fifteen minutes, or even longer. No injury will arise if it should remain for hours. Under the influence of lobelia thus administered, free vomiting will very generally be produced, the system will become relaxed, and the symptoms of croup diminish, and sometimes entirely disappear.

The treatment should be pursued as long as symptoms of croup continue, or until the case prove hopeless. There are few cases of croup, probably, but might be cured by Thomsonian remedies, if early and perseveringly applied. But after the disease has reached a certain stage—for instance, the wind-pipe nearly closed by the formation of a false membrane, within its cavity; or effusion has taken place in the substance of the epiglottis, and thus permanently enlarge it, the obstruction in breathing which must necessarily attend either of these conditions, will be almost certainly fatal.

EXTERNAL APPLICATIONS.—A poultice composed of brown lobelia, pulverized, adding a portion of slippery elm, wet with hot water, and applied to the upper part of the throat, is highly recommended by some practitioners. The poultice must not be allowed

to become cold. By having two poultices, and changing them as the one applied becomes cooler, full benefit will be obtained without exposing the throat, except momentarily, to the air. It is important to protect the skin of the throat, after a poultice has been applied; and after the removal of the poultice, the skin may be bathed with No. 6, or stimulating ointment, and covered with flannel or cotton.

Cases of croup are sometimes cured even after the symptoms have assumed a character indicative of a fatal termination. Dr. Chapman mentions a case of croup to which he was called, in which the disease had continued for three days without the symptoms having been relieved, and as a last resort, they placed the child in a vapor bath, and as soon as the patient began to sweat, the symptoms were relieved. The child was kept in the bath three hours, and recovered. I knew an instance of croup, where a child nine months old took two ounces of the third preparation of lobelia in the course of seven hours, and was cured, when a much milder course of treatment would very probably have failed. The free use of the third preparation of lobelia, and the continued application of the vapor bath, together with stimulating injections, will be the most effectual means where the powers of life are far exhausted. The steam bath, by warming the blood, and expanding the tissues, gives the air greater access to the lungs—the vitality of the blood is increased in proportion as the supply of air is greater, and the warmth imparted to the skin attracts the blood to the surface, and tends to equalize its circulation. I have never applied the vapor bath in a case of croup, without relief to the symptoms, though in far gone cases the benefit will not be of long continuance. A child, held on the lap, will bear a moderate steaming for several hours at a time, provided a proper attention be paid to bathing the head and surface of the body, and giving stimulants. The vapor should be of a temperature sufficient to keep the skin warm, and the patient in a moderate perspiration. In violent cases the lobelia may be given during the application of the bath.

Children are subject to asthma or phthisic, which, in many of its symptoms, resembles croup. But any one acquainted with the

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croup cough, will be able to distinguish it from asthma. With regard to treatment, however, that which would be most effectual in croup, would be equally appropriate in asthma.

# QUINSY.

#### SECTION XXVIII.

This form of disease is characterized by inflammation and swelling of the tonsil glands, which are situated on each side of the throat and behind the root of the tongue.

Sometimes the inflammation is confined to one side, in other instances both tonsils are affected.

Symptoms.—At first there are symptoms of constitutional disorder, as chilliness, loss of appetite and furred tongue, followed by more or less fever. The throat becomes swollen and swallowing is painful. As the inflammation and swelling increase, the efforts to swallow become more difficult and painful, and in some instances the patient is entirely unable to swallow. The voice becomes indistinct or whispering, and in some cases, the breathing is much embarrassed; the pulse is generally full and frequent, and the face red and tumid. There is usually a tough ropy mucous secreted on the inflamed surface, which is expelled with considerable difficulty. The swelling of the tonsils is always observable externally, and the parts are very tender and painful to pressure.

Inflammation of the tonsils is extremely liable to terminate in suppuration. In many instances an abscess will be formed and discharge in a few days from the commencement of the inflammation. There is chilliness at the time the ulcer is forming.

CAUSES.—Persons predisposed to quinsy are liable to an attack from a sudden check of perspiration, more especially after severe exercise or fatigue. Exposure to cold damp air, and standing on damp ground, are the principal exciting causes of this disease.

Quinsy is rarely attended with much danger when properly treated from the commencement.

TREATMENT.—To promote perspiration, and to cleanse the stomach and bowels, are the most important indications for the cure of quinsy. A full course of medicine will be proper in the commencement, as the surest means of moderating the violence and lessening the danger of the disease, and in some instances it will put a sudden stop to a further increase of the inflammation and swelling.

In violent cases the patient should be kept slightly nauseated by broken doses of lobelia in composition or such other warm teas, as are good to promote perspiration. When there is great difficulty in swallowing, the lobelia may be administered by injections, in small portions of luke warm water, and retained. Vomiting may be very readily effected in this way, and prove of benefit in any stage of the disease.

A strong tea of bayberry, or sumac with a portion of cayenne pepper given occasionally, and more especially when the coating on the tongue begins to soften, is peculiarly serviceable to cleanse the stomach.

The feet should be kept warm, and occasionally placed in warm water.

Gargling the throat frequently with very cold water, or vinegar and water, appears to be particularly serviceable in this affection, at the same time taking freely of the hot medicine to sustain the circulation and promote perspiration. Gargles of pepper sauce, or of bayberry and pepper, may also be employed with a view to excite the secretions and clear the throat of mucous. The tincture of lobelia may be usefully employed as a gargle.

Poultices.—Slippery elm, ginger and green lobelia, forms a good poultice, to be applied warm to the throat, and to keep the poultice from getting cold, five or six thicknesses of flannel should be applied over it; or in place of a poultice, spread a plaster of stimulating liniment, or salve, on a piece of silk, oil-cloth, for bladder, and apply to the throat; this last application is preferable to a poultice at night, on account of the liability of the poultice becoming dry and cold.

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Inhaling the vapor from vinegar may give relief.

When an abscess is formed in the tonsil, and the patient greatly distressed from the swelling, it should be opened with a lancet, in order to allow the matter to escape; an operation attended with no danger, and one which gives immediate relief. After the abscess has discharged, a gargle of bayberry or sumac tea should be used, adding a portion of the No. 6, or tineture of myrrh.

PREVENTIVES.—Those predisposed to quinsy, should make it a practice to gargle the throat every morning with cold water, and occasionally sponge the body with cold water, immediately on rising in the morning; and keep the feet dry and warm.

## MUMPS.

### SECTION XXIX.

This is a disease of the parotid glands, which are situate below the ears, and behind the angle of the jaws. It is contagious and often prevails epidemically.

Sometimes the gland on one side only is affected, which does not prevent the disease from occurring subsequently on the other side; but where both glands are affected, there is rarely ever a second attack.

Children and young persons are the most liable to this disease. Mumps is not a dangerous affection, though from exposure to cold, it is liable to be translated to other glands: in the male, to the testes; and in the female to the mammæ, and the former particularly, requires judicious and thorough treatment.

Sympioms.—There is swelling below the ear, extending partly over the cheek and neck, and stiffness of the jaws. The swelling increases and the parts become hard and extremely tender, and in some cases the patient is scarcely able to move the jaws. The swelling usually begins to lessen by the fourth or fifth day. There

is more or less fever from the commencement, attended with restlessness, and sometimes slight delirium.

TREATMENT.—Mild cases seldom require other treatment than keeping the parts warm, and to use some mild stimulant, with a view to promote moderate perspiration, as composition, ginger, or pennyroyal tea.

When the symptoms are more severe, the bowels should be relieved by injections, and the stomach cleansed by an emetic. If the symptons continue to be distressing, broken doses of lobelia should be given with warm tea.

The local applications to the swelling, should consist of volatile liniments; sweet oil and spirits of hartshorn; or camphor, opodildock, &c., and the parts kept warm with flannel or cotton. Especial care should be taken to avoid taking cold.

When the disease is translated to the testes, a full course of medicine should be administered, and the patient kept in a perspiration by being in bed, and drinking of warm teas, and broken doses of lobelia. In severe cases the patient should lie on his back and have the testes supported by a soft cushion, and frequently bathed with volatile liniments, or apply a soft emollient poultice. The poultice should be wet occasionally with warm water to prevent it from hardening. Stimulating applications should be made to the parotid glands, as bathing with the third preparation of lobelia, or using warm poultices containing mustard or pepper, and kept warm.

## COMMON SORE THROAT.

## SECTION XXX.

Soreness of the throat arising from the same causes as quinsy, is distinguished from the latter by the absence of much swelling in the tonsil glands, and no tendency to terminate in abscess.

Sore Throat is a common attendant on colds, and is usually preceded by chilliness and flushes of heat, checked perspiration, and impaired digestion. The throat is dry at first, and there is pain on attempting to swallow; cough, and sometimes an inclination to vomit. There is a discharge of a thick yellowish mucous takes place sooner or later, and the soreness and inflammation subsides.

The treatment should consist of hot medicines to warm the stomach and bowels, and promote perspiration, assisted, if necessary, by the warm foot bath or vapor bath, and the feet kept warm.

An Emeric will be of benefit in severe cases, and small doses of lobelia given to produce slight nausea. This is more particularly indicated when the skin is dry or where there is fever.

The best Gargle for sore throat is capsicum tea; or pepper sauce. When the inflammation subsides, and a thick yellowish mucous is secreted, astringent gargles should be used, such as sumac or bayberry tea.

There is a variety of other remedies useful for colds and sore throat, as flaxseed, or slippery elm tea, with the addition of a portion of lemon juice, and sweetened with rock candy; honey and vinegar, molasses and fresh butter stewed together with the addition of a portion of red or black pepper, is a good remedy for ordinary sore throat.

Filling a stocking with hops moistened with hot vinegar, and applying it to the throat at night, will generally put a stop to the further increase of the inflammation. This is a good application in the early stage of quinsy.

The Constitutional Treatment for sore throat, is precisely such as should be employed in bronchitis, catarrh, quinsy, or any other disorder of the kind. Herein is the excellency of the Thomsonian system—embracing a few general principles, which are applicable to all cases. The human constitution is governed by general laws which are unvarying and unchanging. And although disease may appear in a variety of forms, yet it is always the same in principle, requiring but few general remedies, applied to suit the circumstances of the case.

# APHTHOUS SORE MOUTH.

### SECTION XXXI.

In this disease there is a secretion which forms in patches over the tongue and mouth resembling whey curd. In some cases the disease spreads and covers the tongue, and occasionally extends to the stomach and bowels, appearing at the anus—these parts becoming exceriated.

Local Treatment.—In the first place rub off these white patches with a dry rag; then wet a finger, and cover it with fine bayberry powder, and rub over the tongue and sides of the mouth. Then lay on the tongue some finely powdered chalk, mixed with an equal quantity of loaf sugar. These applications will generally cure in a few times repeating. Rubbing the dry powder over the surface stimulates the mucous glands, and changes the secretions to a healthy condition.

Constitutional Treatment, in mild cases, is seldom necessary, more than to allow the child to swallow the chalk and sugar laid on the tongue.

In more obstinate cases, give the child two or three times a day, a tablespoonful or more of the strong decoction of bayberry or sumac, with the addition of half a teaspoonful of powdered chalk, and sweetened. And if there be symptoms of the disease having spread throughout the stomach and bowels, besides the above mixture give, three or four times a day, half a teaspoonful of composition powder, in a tablespoonful of bayberry tea; and use injections to regulate the bowels. If this is not sufficient, apply the vapor bath to warm the blood, and give an emetic to cleanse the stomach.

# ELONGATED UVULA-FALLING OF THE PALATE.

#### SECTION XXXII.

The uvula, a small fleshy body, hanging from the middle of the arch of the palate, over the root of the tongue, is liable to become elongated, from exposure to cold and damp weather, or from an acid or otherwise disordered stomach. Sometimes there is but a slight lengthening of the uvula, and in other instances it becomes greatly elongated, having sometimes the appearance of a bladder of water, and is very troublesome to the patient from the unpleasant sensation occasioned by it in the throat.

From a frequent occurrence of this affection, the uvula is liable to become permanently elongated, and to excite frequent coughing, which in some instances does injury to the lungs. Cough of long standing is sometimes cured by removal of part of the uvula, where it had become elongated.

TREATMENT.—Recent cases of this affection may, in general, be readily cured by a few doses of composition, or of bayberry and pepper, and using a gargle of black pepper and whisky, or a strong decoction of some vegetable astringent, as bayberry, sumac, witch hazle, or marsh rosemary, adding cayenne pepper.

When the uvula becomes permanently lengthened, and excites troublesome coughing, a portion of it should be cut off, provided the above gargles have no effect in exciting it to contraction. The clear No. 6, or the third preparation of lobelia, may be also used as a gargle where the parts have been long affected.

# DISEASE AFFECTING THE STOMACH AND BOWELS.

### SECTION XXXIII.

Colic.—Colic is usually divided by medical writers into at least three varieties, namely: Accidental or Flatulent Colic, Bilious Colic, and Colica Pictonum, or Painter's Colic.

1. FLATULENT COLIC.—This species of colic is produced by a collection of wind or flatus in the stomach or bowels, from indigestion. Persons of weak digestion and acid stomach are liable to colic from inaccuracies in diet, or from drinking freely of cold liquids, such as lemonade, ice water, or cold milk. Colic generally comes on an hour or two after eating, yet sometimes immediately after. Before the pain seizes the patient, he generally feels a sensation of fullness and distress at the pit of the stomach. In some instances the food passes into the bowels imperfectly digested, and the colic does not come on until several hours after eating, and the pain is chiefly about the umbilicus or navel. When the pain is severe the patient bends his body forward, and twists about with his hands pressing hard upon the abdomen. The pain is generally lessened whenever there is wind forced upward or downward. Sickness at the stomach almost always accompanies colic, and if free vomiting takes place, the distress is greatly mitigated, and sometimes entirely relieved.

DISTINGUISHING SIGNS.—A disposition to press the hand upon the belly; the bending and twisting of the body; the frequent belching of wind, and absence of fever, serve to distinguish colic from inflammation of the stomach. In *painter's colic*, the abdomen, instead of being distended, is contracted, hard, and rigid, and the pain comes on and increases by slow degrees.

TREATMENT OF FLATULENT COLIC.—In colic there is a want of power in the stomach or bowels to contract and expel the wind. The chief indication, therefore, for the treatment, is to administer

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such stimulants, by the stomach or by injections, as will excite contraction, and expel the flatus.

STIMULANTS.—There are a variety of stimulants, either of which may answer in mild cases; such as capsicum or composition tea, Thomson's No. 6, oil of juniper, spirits of turpentine, or essence of peppermint. The teas must be drank as hot as the patient can bear them.

EMETICS.—A prompt emetic of lobelia is the most effectual means for curing colic, when the pain is in the stomach. The liquid of the third preparation of lobelia to be given in hot composition or bayberry tea; or the lobelia powder and No. 6, used in place of the third preparation.

THE VAPOR BATH not only has a tendency to relieve colic, but it assists the operation of the emetic; the bath, however, will seldom be necessary except in very severe cases, and in case the system be very cold or torpid.

Injections.—When the pain is seated in the bowels, injections may be given, prepared in the usual way. A prompt emetic, however, will generally overcome pain in the bowels. When the stimulating injections are expelled suddenly, without affording relief, the lobelia powder should be administered in warm water, and care should be observed to retain them as long as possible.

EXTERNAL APPLICATIONS.—Flannels wrung out of hot water, or wet with hot whiskey, or No. 6; or hot bricks wrapt in damp cloths, should be kept to the stomach and bowels. Heat applied to the feet is also beneficial.

Anti-acids.—In most cases of colic there is acid in the stomach, interfering with the free operation of emetic, which requires to be neutralized by alkalies, such as salarratus, bi-carbonate of soda, or a tea of hickory ashes. Soot tea answers the same purpose, and will of itself, when drank freely, cure mild cases of colic.

When lobelia is not at hand, or cannot be readily obtained, a teaspoonful of mustard in warm water, a tumbler of warm soot water, or warm chamomile or bonesett tea, may be given to produce vomiting.

Infants are peculiarly liable to colic pains, which may be relieved generally by the most simple remedies; as warm tea of cat-

nip, ginger, calamus, or mint. Adding a few drops of the essence of peppermint, or tincture of lobelia, will render the teas more effectual.

Soot tea is very good for colic in infants: emetics, however, are sometimes necessary.

## CHOLERA MORBUS.

#### SECTION XXXIV.

This form of disease is occasioned by indigestion and want of vital power in the system to generate heat and nervous influence. It is common in hot weather, but more particularly in autumn.

Symptoms.—Cholera morbus usually comes on suddenly, commencing with distress and pain at the pit of the stomach and in the bowels, followed by severe vomiting and purging. When the symptoms are violent, the strength is rapidly exhausted, and great distress is felt at the pit of the stomach. The thirst is excessive—and, in many instances, the patient is harrassed by cramps in the muscles of the abdomen and lower extremities, and the pulse is usually irregular and feeble. The severe and continued retching, and strong efforts to vomit, generally occasion more or less bile to be thrown up, which is observable also in the evacuations from the bowels.

The aggravated form of this disease which prevailed a few years since, received the name of Asiatic cholera.

Cholera is generally rapid in its course, and frequently terminates fatally, under unfavorable circumstances; as when it occurs in vitiated and broken down constitutions, or when the patient is subjected to an improper course of treatment, such as large doses of narcotics, or calomel, or when the vital powers are prostrated by the loss of blood.

Causes.—There are certain atmospheric influences that evident-

ly predispose the system to cholcra morbus. The general exciting cause of the disease is, a sudden check to perspiration; unwhole-some food, or that which is hard of digestion; intemperance, and drinking copiously of cold water on an empty stomach. In some seasons, almost every person that is sick will have more or less of bowel complaint. Intermitting fever sometimes commences with a violent attack of cholcra morbus. During the season that the cholcra prevailed throughout this country, almost every person had, more or less, a looseness and disorder of the bowels, showing very plainly that there must have been a cause in the air which tended to weaken the vital principle and enfeeble the powers of digestion.

TREATMENT OF CHOLERA MORBUS.—The most important indication in the treatment of cholera morbus, is a thorough emetic and a free use of injections. The vapor bath should be administered, or hot bricks or bottles of hot water, wrapped in damp cloths, placed around the patient. As long as the symptoms of retching and purging continue, together with pain and cramp, the third preparation of lobelia must be given in full and frequent doses. A milder stimulant, for instance as composition, will in many instances be thrown off the moment it is swallowed, without producing a sufficiently beneficial result. I have witnessed cases in which everything swallowed has been ejected instantly, with the exception of the third preparation of lobelia, which always remained several minutes before it was thrown off, and would bring morbid matter from the stomach, which could not have been thrown off without it. I know of no form of medicine of equa efficacy, in all bad cases, as the third preparation of lobelia in bayberry tea. Patients in many instances have continued retching and vomiting for hours in succession, raising scarcely anything, yet by taking a vapor bath to warm the blood and restore the nervous power, or excitability of the system, followed by a prompt emctic, large masses of undigested food have been thrown off, and the stomach become settled in a short time. Therefore it will not do to be satisfied without giving an efficient emetic, as long as the stomach continues its efforts to relieve itself, or the system sinks into a collapsed state. Even though the system should not contain anything that requires to be removed, and the retching continues from an unsettled, or, as it is termed, an irritable condition of the stomach, the emetic would be as likely to quiet the stomach as any medicine that could be given.

Dr. George M'Clellan stated in one of his lectures, that in the post mortem examinations that he made where patients died of cholera, he invariably found the stomach more or less filled with masses of undigested food, and in many instances observed substances that must have been swallowed many days previous to their death. The doctor adopted the practice of giving prompt emetics in every case that came under his care, and by this course of treatment he succeeded in raising every patient subjected to this mode of treatment.

Flannels wrung out of hot brandy or No. 6, should be applied over the abdomen.

After the disease be checked, which it almost always is, under thorough Thomsonian treatment, the patient must remain quiet and warm in bed, and take occasionally some spice bitters and pepper tea; or the No. 5 syrup, or cholera syrup may be taken occasionally.

I have very little confidence in cholera syrup, or anything else short of an emetic, except in light cases.

The digestion being left weak, care will be necessary to regulate the diet, and to avoid all kinds of fruit, pastry, and everything difficult of digestion. Milk porridge, barley water, custards, &c., will be proper; and, if the patient desire it, he may take moderately of boiled or broiled ham, and also the thin part of a salt mackerel boiled, but neither broiled nor fried.

To allay thirst, the mouth and throat may be gargled frequently with cold water, but cold liquids must not be swallowed, except in very small quantities. Capsicum tea, by exciting the secretions, will generally allay thirst.

A mustard plaster over the pit of the stomach will have a tendency to allay the vomiting and relieve the pain, taking care to remove the mustard, however, before it produces a blister.

# CHOLERA INFANTUM-CHOLERA OF INFANTS.

#### SECTION XXXV.

Infants are especially liable to bowel complaints arising from indigestion, particularly when they are teething. When there is both vomiting and purging, it is called *cholera infantum*. It seldom comes on suddenly violent, as it happens in the cholera of adults; generally commencing with diarrhea, which continues several days, before vomiting takes place; occasionally, however, the vomiting and purging comes on simultaneously.

Infantile cholera, like that of adults, arises from a loss of the powers of digestion; the food being imperfectly digested, becomes sour and acrid, and offends the stomach and bowels, similar to an irritating cathartic; for instance, mandrake, or jalap. The constitution endeavoring to cast off the undigested matter by vomit-

ing and diarrhœa.

Cholera of infants is usually much more protracted in duration than that of adults; generally continuing for several days, and not unfrequently it becomes chronic. In many instances, however, the vital powers sink rapidly, and the disease, if not subdued, will become suddenly fatal. Where the disease is unchecked, the strength soon becomes greatly exhausted; the flesh wastes rapidly; the countenance becomes shrunken and pale; the extremities cold; the belly swollen and hot; the skin dry and husky, or cold and flaccid; the discharges from the bowels frequent, watery, and acrid; the little patient doses with his eyes half closed, and rolls his head when awake. The eyes become sunken and glassy, the lips blue; the breath cold; and finally the patient sinks into a state of insensibility, and in many instances dies with symptoms of dropsy on the brain. Patients have recovered from this disease, however, even after the occurrence of the above symptoms. A feverish state of the system is always more favorable than an opposite condition. In many instances the evacuations from the bowels consist of a deep green fluid—the green color probably is owing to the acid in the bowels, acting upon the coloring matter of the bile.

Thomsonian treatment will generally succeed in curing cholera infantum, if timely and properly administered.

TREATMENT OF CHOLERA INFANTUM.—The same general course of treatment is required in this form of disease, as in that for adults—relying chiefly upon the vapor bath, emetics, and injections, in the early stage, together with the use of stimulants to support the vital powers, to determine the blood to the surface, and to promote healthy secretions; astringents to "remove the canker;" anti-acids and absorbents to neutralize acid; and finally tonics to restore digestion.

The Vapor Bath.—Whoever has witnessed the effects of steaming in cholera infantum, must become convinced of its utility. I have, in many instances, seen little patients made comfortable, at least for a time, by the bath, when they before were suffering the most severe spasms of pain. It is a universal opinion among practitioners of the old school, that the liver is in a state of torpor in this disease, and by failing to secrete bile occasions the stools to be of a light color.

From the close sympathy existing between the skin and the liver, the vapor bath, by its prompt action upon the skin, tends to restore action in the liver. Besides this, the vapor bath, when well applied, warms the blood, and also thins it, by quickening its circulation through the lungs. Steaming will also increase the natural sensibility of the system, and cause the emetic and other remedies to operate more promptly and effectually. The best mode of steaming infants is to do it on the mothers lap, or if they can sit on a table-chair this will be better. The steaming may be continued from fifteen minutes to half an hour, and repeated as often as the case may require, washing over the surface occasionally while in the bath, with spirits, vinegar, or simply with water. The shower bath, or dipping the child instantly from the steam into a tub of cold water, may be practiced with perfect safety. except in very low cases, when there is not heat of nervous energy sufficient to excite reaction. Exciting reaction in this way, it is

in many instances of especial benefit, more particularly in chronic cases. After this the patient should be clothed warmly, and have a flannel bandage over the abdomen, which may be wet occasionally with No. 6, or the third preparation of lobelia.

There is no form of disease in which I have found the vapor bath more beneficial than in bowel complaint. To keep the head constantly wet with vinegar and water, when steaming, is both grateful and beneficial to the patient.

EMETICS may be prepared in various ways. I have generally found the following form to answer as well as any other:

An even teaspoonful of green lobelia, and the same quantity of No. 6, in a small teacup half full of very strong bayberry or No. 3 tea. The lobelia to be added to the tea when moderately hot. To be strained and sweetened; and to an infant give a tablespoonful every ten or fifteen minutes, until free and full vomiting is produced.

In severe cases I have used the third preparation of lobelia, together with a portion of the green lobelia, adding the bayberry tea. Green lobelia in composition tea does very well in many cases.

In cases where I have deemed it necessary to continue the use of a diffusive stimulant, and occasionally to relieve the stomach by vomiting, I have given the liquid of the third preparation of lobelia in a small quantity of boild milk. The best time for giving an emetic is immediately after steaming; still it may be given at any time without the previous use of the bath.

In some cases it may be necessary to repeat an emetic every two or three hours; in other cases once or twice a day; and in others still less frequently; the nature of the case, however, will point out when an emetic is necessary. I have never witnessed any injury to arise from a too frequent repetition of prompt and efficient emetics in *cholera infantum*; but on the contrary, patients are apt to be permitted to suffer, and even to sink from oppression of the stomach, which might have been relieved by the early administration of emetics, before the powers of the constitution had sunk under the effects of the disease; and the heat and nervous energy become too far exhausted for medicine to have a pro-

per effect. The operation of an emetic has a beneficial influence upon the liver in arousing it from a state of torpor.

INJECTIONS.—In the early stage of bowel complaint, an injection repeated three or four times will, in some instances, be sufficient to check the further progress of the disease. They should be prepared in the usual form, of composition tea and green lobelia, or tincture of lobelia; or of a strong decoction of some suitable astringent, such as bayberry, sumac, raspberry leaves, or dewberry root, adding a portion of No. 6 and green lobelia, or a small teaspoonful of the third preparation of lobelia. When the evacuations are green, denoting the presence of acid, or if they be of a frothy acrid character, a portion of salarratus, or a teaspoonful of the bi-carbonate of soda should be added to the injection. When the parts become sore and irritated from repeated evacuations, or the frequent introduction of the syringe pipe, a gum elastic tube, made for the purpose, placed on the pipe of the syringe, will cause much less irritation than the metalic pipe, and by introducing the gum elastic tube four or five inches, the injection will have a more decidedly beneficial effect. In those cases where injections, given with an ordinary syringe, are immediately rejected the gum elastic tube, or a large catheter must be used for the purpose of throwing the injection so far into the bowels as to prevent its immediate expulsion, without having the desired effect.

Composition Powder.—As much of the composition powder as will lay on a ten cent piece, rubbed up with an equal quantity of sugar, and then stirred into a tablespoonful of strong bayberry, or sumac tea, and given, repeating it every two or three hours, will, in general, prove far more beneficial than the composition tea alone. In slight cases, this dose repeated two or more times a day will be sufficient to check the disease, at its commencement. The composition, prepared in this way, may be given in all cases, and when repeated two or three times a day, or as the case may require, it frequently has proved more effectual in my hands than any preparation of cholera syrup that I have ever used.

Capsicum, though unpleasant to administer to children, is nevertheless, one of the most valuable medicines in all cases of disorsic. w.

dered bowels. There are few cases, probably, of cholera infantum that may not be cured by a timely and free use of cayenne pepper. An additional quantity of capsicum added to the composition or spice bitters, will render their use more effectual. A very good way to administer pepper to children, is to add it to a small quantity of boiled milk. It is generally more effectual, however, given in the form of simple tea sweetened. When the tongue is dry and the patient thirsty, the pepper tea should be used instead of the composition and bayberry. I frequently combine pepper with ginger, making a strong tea of them, and give a teaspoonful with the addition of ten or fifteen drops of the tincture of lobelia every half hour.

External Applications.—These may consist of stimulating liniment, No. 6, or the third preparation of lobelia applied to the abdomen; or warm poultices over the region of the bowels, composed of composition powder and green lobelia, moistened with warm water, enclosed in gauze or book-muslin, and applied to the parts. The poultices must be kept warm, for if they become cold they will be likely to do harm. It is a good plan to have two poultices and change them when they become too cold or dry. Mustard plasters over the stomach are useful in some cases, more particularly where the stomach remains irritable and the patient continues retching after the operation of an emetic. The mustard must be removed before it draws a blister.

Anti-acids.—A weak tea made by pouring boiling water upon common soot and sweetened, will relieve colic pains, by causing the removal of the flatus from the stomach. The soot tea, or salaratus, or bicarbonate of soda, is sometimes necessary to be given to neutralize the acid in the stomach, before an emetic will operate effectually.

Diet.—During the active stage, or until the disease be checked, a most careful attention will be necessary in the selection of food. It is better to give the patient no food, at least for a reasonable length of time, than to introduce such into the stomach as it cannot digest. Bermuda arrow-root, gum arabic, crust coffee, coffee made of scorched rice pulverized; milk porridge, Irish moss, boiled milk, oat meal gruel, or barley water, forms the most suid

table article of diet. It will be proper in severe cases to use some one of the above articles for infants that have not been weaned, for the mother's milk will in some cases be thrown up in solid masses soon after it is swallowed, or passed off by the bowels in an indigested state. The excessive thirst attending the disease will induce an infant to take the breast almost constantly, and take large quantities of milk into the stomach, which sometimes forms into masses of cheese-like substance, and will greatly increase the suffering, and even endanger the life of the patient. Drink, as well as food, should be given in very small quantities. A teaspoonful of gum arabic water, or of barley water, is as much as should be given at once, in cases where the stomach is very weak; this quantity, however, may be given very frequently.

As long as food passes through the bowels undigested, such articles of diet must be given as are least disposed to sour or ferment, such as calves' foot jelly, gum arabic water, and crust coffee, and even these in very small quantities. The thirst may arise from a curative action in the stomach, and if large quantities of liquids be taken, the stomach may thereby become oppressed, and unable to recover its diminished vitality.

As the stomach and bowels become more settled, and the stools present a more favorable appearance, such as small portions of natural faces, with thick secretions, in appearance, like small flakes of a skin-like substance, together with bilious matter, showing that the functions of the liver are being restored, then stronger food may be given, as chicken tea, essence of beef, with crackers or stale bread, and milk porridge. Salt should be added to the food, as this is a most important article in most cases where patients are recovering from sickness. Patients, in recovering from cholera very often have a craving for salt food, as old bacon, and salt fish, which will be found not only to gratify the patient, but will tone the stomach, and cause an immediate improvement in the symptoms. The thin part of salt mackerel boiled, or a small piece of salt ham boiled, or broiled, may be given, and the use of it continued, provided it be found not to disagree with the stomach or bowels. "I have seen many children recover," says Dr. Rush, "from being gratified in an inclination to eat salted

fish, and the different kinds of salt meat. In some instances they evince an appetite for butter, and the richest kinds of gravies from roasted meat, and eat them to the obvious relief of all their symptoms." Patients are subject, however, to morbid cravings for food, which may be found to disagree with the digestive organs, and it will therefore be necessary to exercise proper discretion in granting much indulgence to extraordinary cravings for particular articles of food or drink. A child may crave sweet cakes, as ginger bread and pound cake, and yet they may be decidedly injurions; or there may be a craving for cold water, which if given too freely, might occasion fatal symptoms. To restore digestion, the No. 5 syrup may be used, or a tea made by steeping in boiling water, equal portions of powdered black or sweet birch bark, aspen, poplar, and pounded cherry stones. The tea to be sweetened with loaf sugar, and given in tablespoonful doses three or four times a day. This preparation will in many instances care ordinary diarrhoa, both in children and in adults, and is not unpleasant to take. It becomes more effectual by the addition of a portion of No. 6. A strong tea of the poplar bark alone, will answer as a tonic.

When the disease becomes chronic, and medicines have failed of effecting a care, or if the child be subject to frequent relapses, there is probably no means so likely of success, as a change of air, or the cold shower bath. It frequently happens that taking a child with this disease from the city to the country air, will in a few days restore the appetite, and the patient will begin to gain rapidly in flesh and strength.

THE COLD SALT WATER BATH.—In most cases of chronic disease of the bowels, where the patient continues feeble and emaciated, much benefit may be derived by dipping the patient every morning in a tub of cold salt water. If the patient be excessively weak, it will be prudent to temper the water at first by adding a portion of hot water, After being dipped, the child should be wrapped in a blanket, and placed in a warm bed, in order to favor reaction; and if the child becomes warm in fifteen minutes or half an hour, it will most certainly be beneficial. I have, in repeated instances, known cures to be effected by the daily use of the cold bath, where medicine had apparently lost all effect.

Lancing the Gums is often of benefit in the early stage of cholera infantum; more particularly when the diarrhea first commences; but where the disease has prostrated the strength of the little sufferer, and more particularly if the gums be spongy, cutting them will not only prove useless, but hazardous, on account of the excessive bleeding which is liable to take place when the gums are in a spongy state.

Preventives.—Cleanliness; cold baths in the morning; avoiding all unripe fruit, sweet cakes, pastry, &c.; lancing the gums when teething; residence in the country, and a flannel bandage over the abdomen, are good preventives.

## BILIOUS COLIC.

### SECTION XXXVI.

When colic is accompanied with bilious vomiting, or the skin and whites of the eyes become sallow, it is termed bilious colic. The supposition that an overflow of bile occasions the disease, has given rise to the name of bilious colic, when in reality the liver is in most instances in a torpid condition, and secretes less bile than when in a state of health. The digestion being impaired or suspended, the bowels cold and inactive, the bile is not used, and being retained in the duodenum, it is drawn into the stomach by the act of vomiting, and thrown up. A vitiated state of the bile is doubtless a frequent cause of the sickness and vomiting, but this unhealthy condition of the bile is an effect, and not the cause of the disease.

Bilious colic is more liable to occur in autumn, and especially in localities where ague and bilious fever prevail.

In most instances the general health is considerably deranged before the attack of colic is manifest. The appetite is impaired; the tongue coated with fur, and the bowels costive, or otherwise

disordered. The skin is dry, and frequently there is pain and soreness in the back; an uneasy sensation at the stomach, bad taste in the mouth, headache, nausea, and sometimes vomiting. These symptoms are followed by cutting pains in the stomach and bowels; sickness at the stomach, and vomiting: frequently bile is thrown up. The pain increases, and in many instances, assumes a very violent character. There is great prostration of strength, and usually some attending fever. The bowels in almost every instance, are obstinately constipated, having lost their power of action. As the disease continues, the abdomen becomes sore and tender to pressure, and in most instances the complexion has a yellow tinge. The duration of the disease varies greatly in different cases, and as it occurs under different circumstances, sometimes it is overcome in a few minutes, by proper treatment in the commencement, and in other cases it will continue with more or less severity, at intervals, several days in succession.

TREATMENT OF BILIOUS COLIC.—A full course of medicine timely administered, will overcome the pain, and check the further progress of the disease in a great majority of cases.

Emetics are most effectual in general, than any other curative means in the treatment of bilious colic. Even where the pain is wholly confined to the bowels, it is generally relieved by free vomiting, together with the relaxation produced by the lobelia. In sudden attacks, where the pain is violent, an emetic of the third preparation of lobelia, or of lobelia powder and No. 6, must be given without waiting to administer the vapor bath. If, after the full operation of the emetic the pain continues to return, a full course of medicine will be necessary, or the emetics continued, together with the application of hot fomentations to the abdomen; or the application of hot bricks, wrapped in damp cloths to that part. In some cases the emetic will require to be frequently repeated. When the patient has warning of the approach of the colic, a regular course will be more likely to keep it off than a simple emetic without the bath and enema.

There are many persons subject to periodical returns of bilious colic. Such persons are generally dyspeptic, and exhibit marks of a torpid liver. I have known several cases of long standing

effectually cured by an occasional course of medicine, together with appropriate intermediate treatment, and strict attention to diet.

The bowels being obstinately constipated, will require the aid of injections, more especially if the pain be chiefly in the lower bowels. The usual stimulating injections may be used, and they always should contain lobelia. In obstinate cases I have witnessed great relief afforded by introducing a stomach tube, or large catheter eight or ten inches into the bowels, and passing an injection through it; the introduction of the tube, however, requires care, and sometimes it is difficult to accomplish it, even by those who have had experience in the operation. Where the abdomen is not very tender to pressure, an injection of spirits of turpentine is highly recommended by many practitioners. The mode of preparing is to rub together a tablespoonful of turpentine, and the yolks of two eggs, adding a pint of warm water; or mix the turpentine with some dry slippery elm powder, and then add the warm water. I have used injections of the lobelia powder in warm water, and had the patient to retain them, for the purpose of effecting relaxation of the system, which has generally been attended with decided benefit.

THE WARM BATH generally affords considerable relief, and may be used to prepare the system for an emetic.

External Applications.—Besides the vapor and warm bath, much benefit may be derived by the application over the abdomen of warm stimulating poultices, hot fomentations or mustard plasters. The mustard must not be allowed to form a blister.

After the disease is subdued, and if the nervous system becomes weak and agitated, the valerian, or scull-cap tea may be administered; the latter answers both as a nervine and a tonic. To prevent a relapse, the patient should take a dose of spice bitters occasionally, or some other warm medicine, and pay strict attention to diet.

I do not know of an instance of bilious colic in which the Thomsonian practice has failed, when perseveringly applied, not only to remove the pain at the time, but in every case a permanent cure has been effected, even where patients have been subject to frequent attacks of the disease during a period of from two to twenty years. The plan generally to be pursued, is to administer an emetic, or a full course of medicine, when there are symptoms of a disordered stomach, or of an approaching spell of colic.

A Case.—J. M. E. had been subject to attacks of bilious colic, and applied to the Homopathic practice, after the regular treatment had failed. The Homopathic medicine gave him almost instant relief from the pain, and he continued to use the medicine whenever the attack of colic come on, until finally the spells become much more frequent, and attended with neuralgic pains throughout the system. He became alarmed, and placed himself under Thomsonian treatment, and by taking a few courses of medicine, at propper intervals, and stimulants intermediately, he was effectually cured. This patient had not more than two returns of the spells after the first course of medicine was given him.

The above case illustrates the fact, that although a medicine may overcome pain, it may, at the same time not only fail of *removing* the disease, but may lay the foundation for another form of disease still more troublesome.

# COLICA PICTONUM—PAINTER'S COLIC.

### SECTION XXXVII.

This most distressing malady which has received a variety of appellations, such as painter's colic, lead colic and dry belly-ache, is caused by exposure to the fumes, but more particularly to the dust of white lead. Painters, and more especially those who assist in the manufacture of white lead, are liable to this form of disease.

SYMPTOMS.—As the system becomes gradually poisoned by the metallic substance, the general health is correspondingly impaired. There is an uneasy sensation at the stomach; failing of the appetite; constipation of the bowels; general debility

and lassitude; a sense of weight and constriction in the abdomen, with transient pains in the stomach and bowels. By degrees the symptoms become more distressing; the pain in the stomach and bowels increases; the abdomen is hard, and instead of being distended, as in other forms of colic, it is retracted, and the natural action of the bowels is suspended. Vomiting almost always accompanies this disease; and immediately after vomiting the patient experiences more or less mitigation of the pain. This disease is not only of an agonizing character, but it is apt to be protracted in duration, continuing in many instances for two or three days with but slight mitigation of the suffering. In the more violent cases the pain extends from the bowels up to the chest and into the arms, and downwards to the bladder and rectum, accompanied with a distressing sensation of weight and bearing down, and frequently great difficulty in evacuating the bladder. Cold sweats break out over the face and extremities; and, in some instances, there is delirium, stupor, and convulsions. If the disease be not subdued, the vital powers begin to sink; the abdomen becomes swollen and puffy, yet with an abatement of the pain; the thirst is excessive; the sight is impaired; the feet become swollen; the countenance pale and haggard; there is difficulty of breathing, and finally the patient sinks into a state of stupor terminating in death.

By a continued exposure to the poisonous influence of lead, the vital powers become so far exhausted, as to be insufficient, even by the aid of medical means to eradicate the poison from the system, and to restore the organs to a healthy condition. Patients that have had two or three attacks of painter's colic seldom recover fully from the effects of the poison. The appetite is bad; digestion greatly impaired; the natural temperature of the body very low; the extremities always cold; the bowels continue obstinately constipated; the spirits sunken and depressed; the complexion sallow and of a leaden hue; the flesh wastes away; the skin is dry, harsh and contracted; the temper is peevish and sullen, and the countenance is expressive of gloom and suffering. In the first attack of the disease, however, it is almost always curable; though it requires several days in almost every instance to effect

a favorable crisis in the disease. In most instances a cure may be effected, aided by the recuperative efforts of nature, during the first attack.

TREATMENT,—Painter's colic requires the same general plan of treatment recommended for the cure of bilious colic.

The Vapor Bath besides fulfilling other important indications, will prove more effectual than any other means used to remove the poison from the blood. Besides applying the steam, hot poultices composed of pepper and flour, or warm fomentations should be applied to the abdomen. When the vapor bath is found to afford sensible relief, it may be continued for several hours together; the patient being on a bed or mattress, and the surface bathed occasionally with whiskey, vinegar or water; either cold or tepid, as may be most agreeable to the patient; and give occasionally of pepper or composition tea. A poultice composed of lobelia powder and slippery elm, wet with No. 6, will answer a good purpose.

Emerics are as essential in this form of disease as they are in that of bilious colic, or cholera morbus. In many cases free vomiting affords almost the only relief from pain, until the disease be subdued. The third preparation of lobelia answers well for the emetic, except the tongue be very dry, and the medicine occasion a sense of tightness or stricture across the breast; when this happens the lobelia powder should be prepared in a tea of the bayberry, with the addition of a portion of cayenne pepper. Capsicum is one of the best and purest of stimulants, and may be given freely in all cases when the secretions of the mucous membrane are suspended, occasioning dryness of the the tongue and throat.

Injections.—These will be of great service to moderate the pain. They may be administered frequently, especially if they afford relief. Besides the stimulating kind, an occasional injection of two or three teaspoonfuls of lobelia powder, given in luke warm water, and retained in the bowels will tend to overcome the rigidity of the muscles, and alleviate the nervous spasms.

The extreme torpor of the bowels would render the utility of cathartics, to say the least, extremely doubtful; they would have a tendency to harass the stomach, and if not ejected by the stomach

might become absorbed into the blood. The true indication of treatment for getting rid of the poison, is to stimulate the system, and by this means those organs, designed for removing deleterious agents from the system will have their curative action increased.

Astringents are especially beneficial in all cases of painter's colic. A strong decoction of the compound of the bayberry and sumac berries, does better than the tea of the bayberry alone. I succeeded in curing a case of the disease that had become chronic, the patient having been several years employed in Mr. Wetherill's white lead manufactory, where he was daily exposed to the deleterious fumes of this noxious mineral. In this case I found astringents peculiarly beneficial, administered three or four times a day, with the addition of a small portion of capsicum.

This patient also used injections of the same, and occasionally had a vapor bath and an emetic. Large quantities of a thick membranous substance were passed from his bowels by the injections.

It must be borne in mind, that painter's colic is not to be cured in general, short of several days, and in some instance not under two or three weeks.

During the convalescence the patient should take tonics, and once or twice a day, a teacup half or two-thirds full of a decoction of the bayberry and sumac berries, and avoid exposure to the fumes of lead.

PRECAUTIONS.—Those engaged in the manufacture of white lead should make use of fat meats, or use freely of palm oil at meals, and never be exposed to the lead in the morning with an empty stomach. A tablespoonful of palm oil taken in the morning is said to afford protection to the stomach against the effects of this mineral poison.

### DYSENTERY.

#### SECTION XXXVIII.

This disease is characterized by severely griping pain in the bowels; a frequent inclination to go to stool; and the evacuations consist of blood and mucous. Sometimes the evacuations consist chiefly of mucous, at other times they are very bloody.

These dysenteric symptoms are generally preceded by lassitude, chilliness with flushes of heat, loss of appetite, torpid bowels, bad taste in the mouth, and nausea.

From the commencement of dysentery until there be considerable amendment, the natural fæces of the bowels are retained, or voided in very small quantities, consisting of small hard balls, called scybalæ. The passing of these hard balls through the diseased bowels, is attended with severe pain.

Dysentery prevails most during the latter part of summer, and also in autumn.

CAUSES.—Perspiration suddenly checked by cold, especially where the system is exhausted from over exertion, is a common cause of dysentery. "A cold and moist autumn succeeding a warm and dry summer, is peculiarly favorable to the production of dysentery."

Dysentery frequently prevails as an epidemic in low marshy districts of country, probably from the continual influence of marsh effluvia and dampness. The same causes that produce dysentery in one person may occasion bilious fever (as it is called) in another; and hence it often happens that both forms of disease prevail at the same time, and some patients will have all the symptoms of dysentery and bilious fever at once.

Among the occasional causes of dysentery may be mentioned unripe fruit, and other unwholesome articles of food, taken into the stomach.

Dr. Thomson, in his narrative, makes mention of a malignant form of dysentery which prevailed in the town of Jericho, in 1807, where out of twenty cases under the treatment of the medical faculty, but two recovered. The inhabitants became alarmed, and sent an express for Dr. Thomson, who began to treat the disease according to his system of practice, and of thirty cases which came under his treatment, all except two recovered. "I had," says the doctor, "but little medicine with me, and had to make use of such as I could procure at this place. I found the cause of the disease to be coldness and canker; the digestive powers being lost, the stomach became clogged, so that it would not hold the heat. I made use of red peppers, steeped in a tea of sumac berries, and sometimes the bark and berries, to raise the heat and clear off the canker, which had the desired effect. After taking this tea, those who were strong enough I placed over a steam, as long as they could bear it, and then put them in bed. Those who were too weak to stand, I contrived to have set over the steam, and this repeated as occasion required." To restore digestion the doctor made use of a syrup made of black birch bark and cherry stones bruised.

TREATMENT OF DYSENTERY.—Dr. Thomson's course of medicine fulfills all the necessary indications in the cure of dysentery. The *course* should be repeated daily in bad cases.

During the intervals between the courses of medicine, or when the disease is of a mild form, not requiring a course of medicine, any one of the following preparations may be given at intervals of one or two hours, viz:

A strong decoction of bayberry, or of bayberry and sumac, adding a portion of cayenne pepper, and sweetened; or the pepper alone in tea or pills, with an occasional dose of the above decoction.

Another Preparation.—Composition powder and sugar, each a teaspoonful, rub them together, and add a teacup half full of luke warm water, to be stirred together before taken. Prepared in this way the composition has a better effect than when scalded in boiling water.

Another.-Take of fine bayberry powder and sugar, each a

teaspoonful, add two teaspoonsful of No. 6; mix them together, and, if preferred, a wineglassful of luke warm water may be added, or to half a pint of No. 6 add a tablespoonful of finely powdered bayberry, shake the mixture occasionally, and for a dose take a teaspoonful, with a teaspoonful of sugar; this may be taken with the addition of a portion of bayberry tea.

For children and delicate females, milder preparations may

For children and delicate females, milder preparations may answer, such as bayberry tea well sweetened, adding to it a portion of the composition powder; or a simple tea of the bayberry, or composition well sweetened.

The Vapor Bath is signally beneficial in dysentery, and may be frequently administered; and will afford much relief to the patient. After the bath and the patient is rubbed dry, apply stimulating ointment, the third preparation of lobelia, or No. 6, over the surface. Bottles of hot water or hot bricks, wrapt in damp cloths, should be kept to the feet and abdomen.

As a substitute for the vapor bath, in mild cases, wrap the body, from the hips to the arm-pits, with a bandage of flannel. The constant application of warmth and pressure, is of great importance, and well adapted to all cases of bowel complaints, both acute and chronic. The flannel roller should be applied even after the vapor bath is administered, and also when the patient goes to stool, in order to protect the body from the air.

Injections.—The inflammation that exists in dysentery is the

Injections.—The inflammation that exists in dysentery is the result of the reaction of the constitution to overcome the debility or loss of vitality of the parts. Injections assist the healthy action, and remove acrid secretions. They should be composed of astringents and stimulants. A strong decoction of bayberry, dewberry root, or raspberry leaves, adding a teaspoonful of the liquid of the third preparation of lobelia, to half a pint of the tea; or scald a teaspoonful of pepper with the other articles: add a teaspoonful of lobelia powder, and stir the mixture. Lobelia in some form, either the powder or liquid of the third preparation, should generally be added. A large teaspoonful of lobelia powder infused in half a pint of warm water, or half a pint of composition tea, may be used in place of the more stimulating injections.

When the stools are very offensive, the purified charcoal should

be added to the injections, and also given occasionally with the medicine otherwise taken. In the place of the charcoal the chalk mixture may be used; or the bi-carbonate of soda or saleratus.

The chief objection to frequent injections, is the irritation produced by the metallic pipe of the syringe. It should be well covered with oil or tallow; or a gum elastic tube made for the purpose, placed on the metallic pipe.

Professor Chapman, in a lecture on dysentery, in 1840, stated, that at Vera Cruz, the only successful treatment in the malignant dysentery that prevailed there, consisted of giving the patients freely of cayenne pepper tea, and using injections of the same.

A case of dysentery occurred in Chester county, of the most severe character, in which a quarter of a pound of cayenne pepper was used by injection and given in tea during one night, together with a large quantity of the hot drops, and bayberry tea. The patient speedily recovered, and no doubt by means of this energetic treatment.

DIET.—This must be of the lightest kind of food, such as barley water, arrow root gruel, weak chicken tea, sago, rice, slippery elm, Iceland moss, the bene plant, &c. When the patient becomes convalescent, stronger food may be given, as boiled chicken and wild game.

To assist in restoring digestion, the spice bitters and other

tonics may be employed.

FAVORABLE Symptoms.—"The appearance of bile, and natural fæces in the stools, indicate a favorable change." When the pain, and inclination to stool, "and tenderness of the abdomen abate, at the same time that the skin is uniformly moist, we may regard the case as approaching a state of convalescence; and more certainly if the stools assume a more natural appearance."

## DIARRHŒA;—RELAX.

### SECTION XXXIX.

This complaint is a consequence of indigestion. It prevails most during hot weather, and presents in different cases, great diversity of character, being in some cases an obstinate and painful disease, and in others a slight affection. Children are extremely liable to this form of disorder throughout the hot summer months, and also in the damp and changeable weather of autumn.

General Causes.—Diarrhea may be produced by any cause which weakens the power of digestion. The usual causes are continued spells of damp, mucky weather; wearing damp clothes; a sudden check to perspiration, when the system is exhausted by fatigue; unwholesome articles of food, especially sour fruit; and drinking too freely of cold liquids, as ice water or lemonade.

Symptoms.—At first there is usually loss of appetite, general debility, coldness of the feet, and bad taste in the mouth. The patient experiences unpleasant sensations at the pit of the stomach; there is generally a rumbling through the bowels, followed by copious evacuations, consisting of thin offensive secretions, and imperfectly digested food, and frequently attended with pain. The skin is either cold and clammy or dry. When the disease comes on suddenly and is attended with vomiting, it is called cholera morbus. The color of the stools, in many instances, are light, indicating a want of bile; in other instances they are partly composed of vitiated bile.

DIARRHŒA, DYESENTERY, and CHOLERA MORBUS, may arise from the same cause, or combination of causes.

DISTINGUISHED MARKS BETWEEN DIARRHEA AND DYSENTERY.—In diarrhea the bowels are in a relaxed condition, with copious evacuations, consisting chiefly of imperfect digested food, and generally free from blood or mucous. In *dysentery* the bowels are costive, the natural fæces retained, and the stools consist

principally of blood and mucous, small in quantity, and the disease is attended with severe griping, and a frequent inclination to go to stool.

TREATMENT OF DIARRHEA.—In slight cases a few doses of composition or bayberry tea, with the addition of No. 6, will, in general, check the disorder and correct the digestion. A variety of other remedies may be used for this complaint, such as cholera syrup, Thomson's No. 5 syrup, lavender brandy, burnt brandy and loaf sugar, chalk mixture, lime water, and purified charcoal. Salt and water is a remedy in many families.

When the symptoms are more distressing, or the case proves obstinate, the most effective means will be a *full course of medicine*, succeeded by the use of the hot medicine, and the patient kept comfortably warm and quiet.

In the commencement, in many instances, but more especially when the disorder has been checked, bitters should be used to restore digestion.

Flannel Bandage.—Persons subject to frequent attacks of diarrhea, may derive great benefit by wearing a flannel bandage covering the whole of the abdomen. This will keep the skin regularly warm, and prevent a sudden check to perspiration from the vicissitudes of the weather. This simple plan of bandaging the belly, will generally prevent the summer complaint in children, even during their second summer, provided they be bathed daily, and a proper attention paid to their diet.

When the disease becomes protracted, and the symptoms distressing, a prompt course of treatment should be pursued until the disease be removed. The vapor bath and emetics should be repeated as the nature of the case may require. In cases of children I have frequently witnessed more benefit derived by one vapor bath and an emetic, than would have been accomplished probably in two or three days under a mild course of treatment. When medicine has to be forced upon children it is certainly best to give such as will be the most effectual to break up the disorder.

Let the No. 3, or bayberry powder be made into a strong decocition, and to a teacup half full of this tea, add an even teaspoonful of composition powder. This given two or three times a day,

will be an effectual remedy in most cases of simple diarrhæa. The No. 3 pills may be used in place of the decoction.

INJECTIONS of the above tea, adding a portion of No. 6 and green lobelia, or a teaspoonful of the third preparation of lobelia, will be found especially beneficial to strengthen the bowels.

Diet.—Especial attention to diet is necessary in all bowel complaints. In general, milk porridge, well prepared, will agree well with the stomach, and in some cases will check the disorder, by confining the diet to it alone, or with the addition of stale bread cut thin and toasted thoroughly, or soda or water crackers. Fruit of every description is apt to disagree with the bowels in diarrhœa, unless it be fresh picked, and eaten with some sold food.

Boiled rice and milk, Bermuda arrow root, elm gruel, sago, tapioca, fresh eggs slightly cooked, essence of beef, boiled chicken, crust coffee, and Irish moss, are such articles as are generally adapted to cases of diarrhea. Rice scorched, ground, and made into coffee is a favorite remedy with some for this complaint.

I have known cases of chronic diarrhea cured by a free use of capsicum at meals.

## PERITONITIS.

### SECTION XL.

(INFLAMMATION OF THE PERITONEUM.)

DISEASE of the peritoneum (the membrane lining the cavity of the abdomen, and which also forms the external coating of the bowels) is not of very frequent occurrence: when it does take place, however, it is in many instances extremely difficult to cure, unless a vigorous and persevering course of treatment be instituted in the first onset of the disease.

Causes.—Long exposure of the body to cold after fatiguing exercise, is the usual cause of peritonitis. It may arise, also, from other causes, as taking too freely of ice water; mechanical injuries of the bowels; the escape of fæces into the eavity of the belly from wounds of the intestines, or by ulceration through the coats of the bowels; wet and cold feet; and, in females, from bad management during, or after confinement. In two fatal eases that came under my notice, one was brought on by washing the body in cold water, the patient remaining undressed until the body became completely chilled: the other case was produced by standing some hours in cold water, up to the middle, in a well.

SYMPTOMS.—The first symptoms are such as usually occur in the commencement of other forms of disease, such as chilliness, lassitude, pain in the limbs, and distress at the pit of the stomach. In some instances an acute pain is felt in some part of the belly, from the commencement. In other instances, and even those of the most rapidly fatal character, there is scarcely any pain felt during any period of the disease.

THE SYMPTOMS WHICH CHARACTERIZE THIS DISEASE, are extreme tenderness to pressure over the surface of the abdomen, and the patient assumes a bent posture in order to relax the muscles of the belly; with constipation of the bowels, and pain of an acute character, generally confined at first to a small space, and spreading gradually, and sometimes shifting suddenly from one spot on the belly to another. In most instances there is at the commencement of this disease, and always in the latter stage, if the disease terminate fatally, more or less vomiting. The eountenance is pale, and expressive of extreme anxiety and distress. Generally, in the course of from twenty-four to thirty-six hours, the abdomen becomes swollen, tense, and elastic from flatulent distention of the intestines, and extremely tender. Respiration is oppressed and laborious in the latter period of the disease; inspiration especially, being short, difficult, and attended with an expression of pain in the countenance. The secretion of urine is almost invariably more or less diminished, and in some instances. almost wholly suppressed. When the peritoneal coat of the bladder is the seat of inflammation, the evacuation of urine will almost

uniformly be suspended, and much pain felt in the pelvis. The peritoneal covering of the inferior surface of the diaphragm is occasionally the principal or sole part of this membrane that is inflamed, and in this case almost constant hiccough attends.

In most instances the peritoneal inflammation terminates by the sixth or seventh day, either in resolution, or fatally. In some cases its course is much more rapid, the patient sinking by the second or third day from the commencement. Occasionally, however, the disease is prolonged to the thirteenth or fourteenth day.

This disease is extremely liable to terminate in gangrene. "When this occurs, the abdominal pain suddenly subsides; the pulse becomes very small, frequent, and often intermitting; great muscular prostration ensues; the extremities become cold and clammy; and the countenance pale, hollow and contracted;" there is a sort of gulping up of the liquids when swallowed, and usually more or less delirium.

When peritoneal inflammation ensues after confinement (constituting puerperal fever,) the louchial discharge ceases, and the secretion of milk is suspended, or nearly so. Under such circumstances the disease is mostly rapid in its course.

TREATMENT.—There is probably no form of disease requiring more vigorous treatment than peritonitis. The first and most important remedy is a vapor bath, which should be continued for hours together; the patient being on a cot or mattress, if too weak to sit up; and at the same time frequent and full doses of the third preparation of lobelia should be given, together with lobelia injections, composed simply of lobelia powder in luke warm water, and retained, if possible; and as often as every hour or two, an additional injection, consisting of a tablespoonful of the liquid of the third preparation of lobelia in bayberry tea. In place of the vapor bath, blankets wrung out of hot water, may be applied to the abdomen, or a large poultice composed of elm powder, green lobelia and ginger, applied all over the belly, as hot as can be borne, and to be kept warm by bottles of hot water or hot bricks placed close to it, or it may be taken off and warmed when necessary.

It is important to relax the system in the early stage of the dis-

ease, by giving besides the third preparation of lobelia, frequent doses of an infusion of the brown lobelia. The more the system becomes relaxed by the lobelia in the early period of the disease, the greater will be the chance for the inflammation to establish a favorable crisis.

When a favorable crisis takes place, and the system sinks into a state of extreme exhaustion, as is frequently the case, more especially when the disease occurs in the puerperal state, diffusive stimulants should be employed, as wine whey, carbonate of ammonia, the third preparation of lobelia, capsicum tea, &c.

"There is a period in some cases of abdominal inflammation when the disease is nearly subdued, yet a tendency to gangrene exists from deficiency of vital power. At such a time the pain will vanish, the pulse become weak, the vital powers sink, and a coldness overspread the body. These symptoms are too often indicative of mortification; but every experienced practitioner must have occasionally witnessed cases of recovery even from this alarming state." Therefore the free use of stimulants under these circumstances, may have the effect to turn the scale in favor of recovery, and even if mortification should have taken place, stimulants can do no injury.

## CONSTIPATION—COSTIVENESS.

### SECTION XLI.

Costiveness, in general, is a consequence either of diminished peristaltic action of the bowels, or of a torpid liver. The habitual use of purgative medicines destroys the natural tone of the bowels, and thus proves one of the most common causes of constipation. A patient becomes uncomfortable in consequence of the slugglish state of the bowels, and a dose of physic is taken. In a few days, however, the same bad feelings return, with loss of

appetite, furred tongue, and bad taste in the mouth; there is heaviness and langour, and oppression at the stomach. The patient supposes he is bilious, requiring another dose of physic to purge off the accumulation of bile, and in this way continues its use at frequent intervals, harassing the stomach and destroying the natural action of the bowels. Costiveness is sometimes constitutional, and in general it arises from causes which depress the nervous energy, such as sedentary habits, foul air, intemperance, or all kinds of deleterious medicines, whether mineral or vegetable. The practice of giving anodynes to infants weakens the tone of their bowels, and in numerous instances the foundation of habitual costiveness is laid. It is very common in the old practice for a physician to recommend laudanum, or some other preparation of opium, for children and infants when sick, and on the following day prescribe a dose of oil to move the bowels, which had become torpid in consequence of the anodyne; the physic disturbs the stomach and impairs the digestion, and the little patient consequently becomes fretful. Another dosc of anodyne is administered, which benumbs the sensibility of the nervous system, and the child sleeps, but the medicine instead of removing the disease rather increases the difficulty; costiveness continues, and another cathartic is prescribed, and thus one medicine is given to counteract the bad effects of the other. Not only in such a course generally pursued in the treatment of infants and children, but a similar one is resorted to by many physicians in the majority of cases of sickness, in adults that are placed under their care. It is very rare to find a person affected with obstinate constipation of the bowels who has never been in the practice of taking cathartics.

There are persons constitutionally costive, whose bowels are not moved oftener than once a week, and yet the general health remains good. Such instances, however are very rare, for most persons feel uncomfortable without an evacuation as often as once in twenty-four or forty-eight hours.

Means to Remove Costiveness.—There is a great diversity of remedies and means to restore the action of the bowels.

A PROPER DIET.—Certain articles of food will in a great many

instances keep the bowels regular, such as stale bread, or gruel made of ground wheat, unbolted, Indian bread, ripe fruit, rye mush, oat meal gruel, and calves' foot jelly. No certain plan of diet can be proposed that will suit every one. Bread made of unbolted wheat flour will probably agree with almost every one, and its efficiency has been so well attested as not to admit a doubt of its efficacy. I have known obstinate cases of constipation overcome by the free use of a gruel made of the unbolted flour, together with the use of cayenne pepper, and the entire absence of every kind of cathartic. In the use of the unbolted bread or gruel, other kinds of food need not be excluded. Animal food is necessary to the health of some, and should be used when it agrees with the stomach. Beef, mutton, and all kinds of wild game are as readily digested as vegetables.

Charcoal.—Finely pulverized charcoal, taken in large teaspoonful doses, repeated three or four times a day, is a valuable remedy for costiveness, especially when constipation is accompanied by a sour stomach and heart burn. Costiveness arising from pregnancy, may in most instances be removed by the free use of charcoal. In the latter stage of pregnancy, however, it is sometimes necessary to resort to the use of stimulating enemas, in order to evacuate the bowels. The charcoal should be first moistened and rubbed into a paste, and it will then mix readily with liquids. I generally direct it to be taken in composition or spice bitters tea. It may be taken, also in simple warm water, or in boiled milk. The dose is from a teaspoonful to a tablespoonful, repeated three or four times a day before meals.

White Mustard Seed is a favorite remedy used by many to stimulate the bowels, and overcome costiveness. The usual dose of the mustard seed is a tablespoonful once or twice a day, taken in warm water or molasses.

Capsicum.—This is one of the purest and best of stimulants, and is especially beneficial in most cases of torpid bowels. Taken freely at meals, it will not only assist the action of the bowels, but will be sufficient, if used freely, to cure many cases of dyspepsia. There are many kinds of food that may set well on the stomach, if highly seasoned with cayenne, but which without it, would oc-

casion oppression, and distress the stomach. Those who do not relish food highly seasoned with pepper, may take the cayenne immediately after eating, in a little cold water, or as some prefer, swallow the whole pods of the bird pepper. These pods are not thicker than a small goose quill, and scarcely ever an inch in length, so that half a dozen may be swallowed at a time, and no burning produced in the mouth. Ten or fifteen of these pods taken daily, will be sufficient, in general, to keep the bowels regular.

Astringents.—When the tongue is thickly furred, and not dry or parched, the astringents recommended by Thomson will be useful by cleansing the cankered bowels and increasing their tone. The best astringent is the bayberry, or a compound of bayberry and sumac. The No. 3 pills may be used in place of the above powder in decoction. Injections assist very much in cleansing the bowels of morbid secretions, and also have a tendency to increase their tone.

BITTERS.—Vegetable bitters are particularly indicated when the system is relaxed, as in recovery from sickness when the bowels remain torpid. A teaspoonful of bayberry powder taken two or three times a day, will be sufficient to keep the bowels regular, in those cases where tonics are indicated. The golden seal, balmony or black aspen poplar, may be employed for the same purpose. In continuing the use of tonics, it is proper to change one for another, or to compound them differently every few days.

Injections should be used occasionally, until, by other means, the natural action of the bowels be restored. When constipation is attended with piles, an injection of a strong decoction of the witch hazle, at bed time, retained in the bowels until morning, will in general procure a passage from the bowels, and also assist in curing the piles.

Cleanliness, exercise in the open air, the warm bath, the shower bath, the daily use of the flesh brush, or salted towel over the surface, and whatever else will invigorate the nervous system, will have a salutary effect upon digestion, and assist the peristaltic action of the bowels.

The habit of soliciting a stool at a certain hour daily, more

especially in the evening, though it may fail at first, if persevered in, will generally prove successful.

Three or four of the compound lobelia pills, taken at bed time, have proved successful in many cases, in regulating the bowels, and in promoting the secretion of bile.

# DYSPEPSIA - INDIGESTION.

#### SECTION XLII.

Digestion is accomplished by a series of actions extremely complicated, liable to derangement from various causes. Hence dyspepsia is a common complaint, and prevails in all classes of society.

Causes.—Dyspepsia in many instances is a consequent of original feebleness in the constitution. Apart from this, the following are among the common causes of indigestion:

- 1. Exposure to Cold and Dampness—especially Damp Feet.—This is a common cause of dyspepsia in the country during damp seasons of the year.
- 2. Tobacco.—The inordinate use of this article is a fruitful source of dyspepsia. It causes imbecility of mind, and in some instances melancholy.
- 3. Purgative Medicines.—The long continued use of cathartics impairs the functions of the stomach and bowels, and in frequent instances, where there is but slight derangement in the stomach at first, "the drugs are poured down," and the case becomes one of confirmed dyspepsia.
- 4. Anodynes.—All the various preparations of opium, such as laudanum, Godfrey's cordial, &c., enervate the stomach, and weaken the power of digestion. Hence dyspepsia often takes place in childhood by the prevailing practice of giving anodynes during infancy.

- 5. Sedentary Habits.—Persons engaged in sedentary pursuits—seamstresses, shopkeepers, shoemakers and tailors, are liable to dyspepsia, especially when confined to small and ill-ventilated apartments.
- 6. Unwholesome Food.—Many who by a proper diet might have enjoyed good health, are tormented with indigestion, in consequence of the use of food difficult to digest, such as hot bread, fresh pork, hot cakes, sausages, pies, &c. Hearty suppers, especially of such food as sausages, hot cakes, and strong coffee, cause restless and disturbed sleep, frightful dreams, and nightmare.
- 7. Blood-letting.—Many cases of dyspepsia may be traced to the profuse depletion frequently practiced by physicians in pleurisy, and in the various forms of acute disease attended with high fever. The system becoming exhausted from loss of blood, the organs are left in a languid condition, incapable of performing their functions properly, and in many instances occasion confirmed dyspepsia.
- 8. Mercury.—Professor Chapman asserts that the majority of cases of chronic affections of the liver prevalent in the Southern States, is owing to the inordinate use of mercury, it being a practice among the physicians to administer it in enormous doses. Digestion never can be properly performed whilst the liver is diseased, and therefore, all such cases are more or less dyspeptic.
- 9. Intemperance is a fruitful cause of dyspepsia. The practice of taking a morning dram, which prevails in some districts of country is usually followed sooner or later by indigestion.
- 10. Abstinence may be practiced too rigidly to be compatible with health, and it may even produce dyspepsia. The exclusive use of a vegetable diet, together with cold water at breakfast and supper, in the place of good tea or coffee, is calculated to enervate the stomach.

There are cases in which an exclusively vegetable diet suits the stomach, but with the great majority of mankind, animal food, such as beef, mutton, or wild game, will be found more easy of digestion than a vegetable diet.

11. Bad Teeth.—Irritation of the gums arising from teeth that are either decayed or affected with tartar, is a frequent cause or dyspepsia.

A lady from Natchez consulted Professor Chapman for dyspepsia of long standing, and the doctor perceiving the bad condition of her teeth, suspected this to be the cause of the dyspepsia; the decayed stumps were removed, the mouth put in good condition, and the dyspepsia was soon cured. Subsequently this lady had a new set of teeth put in, but which being badly done, the dyspepsia returned with great violence. The teeth were removed, and by being properly adjusted, so as not to irritate the gums, she was soon restored to perfect health.

12. Piles often produce dyspepsia, and in many instances the

dyspepsia may be cured by their removal.

13. Moral Impressions.—From the close sympathy existing between the brain and the stomach, moral impressions have a controlling influence over digestion. If a man, soon after eating a hearty meal, hear bad news, his digestion will at once be weakened, if not suspended. Close application to study soon after meals, by concentrating the nervous energies in the brain, weakens the power of the stomach to perform digestion.

In fine any cause that weakens the nervous energy, impairs the

In fine any cause that weakens the nervous energy, impairs the digestive functions; hence venereal excesses are a common cause

of dyspepsia.

It is a general impression that dyspepsia prevails most among the higher ranks of society, and that the poor, notwithstanding their hardships, are generally blessed with vigorous digestion. The great majority of cases of dyspepsia that I have met with, have been among the hard laboring classes, more especially in those whose business required them to be indoors, as cotton and woolen manufacturers, weavers, shoemakers, tailors, &c. The wealthy pay greater attention to bathing, they sleep in large and airy rooms, and partake of the best of food.

Symptoms of Dyspersia.—A low temperature of the body; oppression, tenderness, and distress at the pit of the stomach; torpid bowels; heart-burn; frequent belching; sour cructations; offensive breath, and often some degree of fever or excitement

after meals. In some instances, the appetite is irregular, or depraved, craving green fruit; sometimes the appetite is entirely gone; the spirits are variable, and frequently depressed.

In the more aggravated form of dyspepsia, the mind is liable to become much depressed, approaching in some instances to extreme melancholy, with harrassing belchings; water brash; stools clay colored, indicating the absence of bile, the skin is dry and husky, yet sometimes cool and clammy; there is wasting of the flesh, and ulceration of the tongue and mouth. Pain in the head, palpitation of the heart, dizziness and temporary blindness, and violent pains in the shoulder and side, are symptoms frequently attending dyspepsia.

Sometimes in dyspepsia the sensibility of the stomach is so obscured that the derangement of the digestive organs is scarcely perceived by the patient, the principal symptoms being developed in parts remote from the stomach, where sensibility is more acute. Such is the degree of insensibility in the stomach, that it may become diseased and give rise to almost every variety of disorder without any particular symptoms of derangement being manifest in its own peculiar region.

DISORDERS PRODUCED BY DYSPEPSIA.—Dyspepsia long continued not unfrequently brings on consumption, especially when there is constitutional weakness of the lungs.

Many, if not most of the cases of bronchitis, are a secondary effect of dyspepsia. Clergymen are very liable to disease of the throat, occasioned more by mental labor soon after meals, than by their public speaking.

The liver possessing a close sympathy with the stomach, becomes torpid and inactive in many instances, in consequence of the cold and weak condition of the latter. More especially does this occur in the intemperate.

Bilious colic and sick headache are brought on in consequence of bad digestion.

TETTER is not unfrequently dependent upon indigestion, and in some instances cannot be cured until the stomach is cleansed, and digestion restored.

ASTUMA is generally connected with dyspepsia.

The stomach, in fine, possessing a controlling influence over the functions of the various organs of the body, may, by having its powers enfeebled, bring on an endless variety of disordered symptoms in other parts. More especially is the train of evils resulting from dyspepsia multiplied and aggravated when the stomach is harrassed by the use of cathartics, anodynes, and other deleterious drugs.

TREATMENT OF DYSPEPSIA.—Dr. Thomson's course of medicine administered at proper intervals, as the symptoms indicate, together with proper intermediate remedies, will effect a cure in a great majority of cases. If the continuance of the disease depend upon bad habits, a cure cannot reasonably be looked for whilst they are continued.

If close confinement in unhealthy apartments be the cause of dyspepsia, exercise and fresh air will be as essential as medicine.

When dyspepsia arises from a bad condition of the teeth, they should be attended to by the dentist, and by one who is properly acquainted with his profession.

Purgative medicines impair the tone of the stomach, leaving the bowels costive, and therefore should be dispensed with in dyspepsia.

EMETICS.—An emetic of lobelia, prepared in the usual form, will sometimes relieve the stomach sufficiently, without the necessity of a full course of medicine.

To promote a healthy action of the skin, an occasional vapor bath, or warm bath, and the daily use of the flesh brush or salted towel, will be the most effectual means.

Capsicum.—The free use of cayenne pepper at meals, will be sufficient to cure dyspepsia in many instances. It is useful to prevent heart-burn and water-brash, and has a tendency to regulate the bowels.

Composition Powder.—Dyspepsia of a mild character may be cured by taking a dose of composition two or three times a day. When the patient is exposed to the weather it is best not to prepare the composition in boiling water, but first mix the powder with sugar, and then add half a teacup of *luke-warm* water, stir the mixture well and swallow it before it settles.

THE SPICE BITTERS may be taken in the same way, and for the same purpose.

The Conserve of Hollyhock is a mild stimulant and tonic, and useful in cases of feeble digestion. It is a convenient medicine for persons traveling.

Charcoal.—Purified charcoal being an absorbant and antiseptic, and operating as a mechanical stimulant to the bowels, may be used with advantage in cases of sour stomach, attended with costiveness. The dose is a large teaspoonful to be rubbed up with about an equal quantity of sugar and water, and then add a teacup two-thirds full of a tea of composition or spice bitters, taken on an empty stomach, and repeated two or three times a day.

In dyspepsia accompanied with a pale tongue, relaxed skin, and general debility, stronger tonics must be used, such as Dr. Thomson's No. 4 bitters, quassia, wormwood, &c., either prepared in decoction or in tincture.

When there are symptoms of dyspepsia with extreme insensibility of the stomach, benefit may be derived from mechanical means, as riding on a rough trotting horse, or in a rough carriage after dinner, or punching or kneeding the stomach, as discovered and introduced by a Mr. Hallstead, of New York, who was cured of dyspepsia attended by extreme insensibility of the stomach, by making a false step, by which his stomach received a severe jar.

Alkalies.—Where there is a large amount of offensive gas ejected, either upwards or downwards, the use of lime water will be beneficial.

In cases of simple acidity of the stomach, the super-carbonate of soda, or salæratus, will neutralize the acid. Chalk may be used for the same purpose, and in some instances will have a better effect than soda or salæratus.

The following was a favorite remedy with the late Dr. Physic: Take a quart of hickory ashes, and a teacupful of common soot, pour on them a gallon of boiling water. The dose a wineglassful after meals.

A decoction of wormwood and hickory ashes fulfils the purpose both of a tonic and anti-acid.

In some eases of dyspepsia, acids will be found to be more beneficial than alkalies, even though there should be acid in the stomach. A mixture of vinegar, salt and pepper, will be of benefit in many cases. From ten to thirty drops of the elixir of vitrol, in a wineglassful of water, or of bitter tea, three or four times a day, will be grateful to the stomach, and assist digestion.

A tablespoonful of dry wheat bran, two or three almonds, or a teacupful of boiled milk, will relieve heart burn.

Colic.—Dyspeptics are liable to eholicky pains, from an accumulation of gas in the stomach, which may generally be relieved by Thomson's No. 6, or the volatile tincture of guiacum, given in hot water, composition or pepper tea, and swallowed as hot as the patient can bear. The oil of amber, spirits of turpentine, or oil of juniper may be used for the same purpose. Ten drops of the oil of amber, rubbed up with sugar, and mixed with a small quantity of slippery elm mucilage, will sometimes remove the severest forms of colic, especially when the stomach is very weak. When the case is very severe, the vapor bath, followed by an emetic of the third preparation of lobelia, will be the surest means of relief.

Pain in the Bowels.—This may generally be removed by injections. A stomach tube, or large gum elastic catheter, introduced eight or ten inches into the bowels, and the injection passed through it, will give relief in cases where the injections given in the usual way have little or no effect. Great benefit may be derived from hot fomentations, or a warm poultice applied to the abdomen.

Costiveness.—A torpid condition of the bowels exists in most cases of dyspepsia, and in many instances it is difficult to overcome, where purgatives have been freely used. Bran bread, or bread made of unbolted wheat flour, is an excellent remedy for costiveness. Cayenne pepper, or pepper sauce, used freely at meals, or immediately after eating, will assist digestion, stimulate the bowels, and frequently be sufficient to overcome the constipation. Clean wheat bran, charcoal, and white mustard seed, act as mechanical stimulants to the bowels, and may be used accordingly. Injections may be used to evacuate the bowels when

necessary, until by a proper course of treatment, and a well regulated diet and regimen, their natural action become restored. Avoid aggravating the bowels by the use of cathartics, as it will be difficult for the bowels ever to recover their natural tone and action, as long as the patient continues to take every week, or every few days, a dose of cathartic medicine.

Diet in Dyspersia.—No system of diet can be laid down, suited to every case of dyspersia.

Milk generally agrees with dyspeptics. Milk porridge, boiled milk and rice, Indian mush, well boiled, allowed to become cold, and eaten with boiled milk, and boiled milk and toast, are suitable articles of diet in most cases of dyspepsia. More especially is a milk diet proper for the morning and evening meal. Milk, when taken cold and in large quantities, sometimes forms an indigestible mass, of a cheese-like substance, occasioning great oppression at the stomach.

As a substitute for milk when it disagrees with the patient, cocoa or chocolate, black tea, or what is better, the anti-dyspeptic cocoa, prepared by A. Comfort, of Philadelphia, may be used. In some cases of dyspepsia, coffee, well prepared, may be taken, not only with impunity, but with advantage. Much of the evil arising from the use of coffee, is owing to the bad quality of the article, and to the careless manner in which it is frequently roasted and prepared.

Of animal food, all kinds of wild game when in season, eggs, chicken, turkey, fresh beef and mutton, are the most digestible. Salt pork agrees with many. Fresh pork disagrees with the dyspeptic in almost every instance, yet, notwithstanding, some cases have been cured by eating broiled fresh pork, although such cases are very rare. In some, animal food of every description will disagree with the stomach. All kinds of soups are objectionable from their liability to sour in the stomach: though in small quantities they may not disagree with it. There is not the same objection to essence of beef, as to soups.

Bread made of unbolted wheat flour has become a favorite article of diet for dyspeptics, and answers well in the majority of cases. Toasted bread agrees well with many. It should be cut in thin slices and toasted through, so as not to have it doughy in the middle. Bread should not be eaten until at least twelve hours old. Hot cakes should be avoided. Cakes, however, made of Indian mush which has been previously well boiled, will agree with many. Regularity in meals is important. No food should be taken between meals. If a person of feeble digestion eat a piece of gingerbread or pie, an hour before dinner, the appetite will be weakened, and then if the patient eat the usual meal, the food will oppress the stomach.

Besides the remedies already enumerated for the treatment of dyspepsia, there is yet one equally beneficial and suited to almost every case, viz:

A strong decoction of the powdered bayberry, with the addition of a portion of cayenne pepper, and sweetened. This will remove morbid secretions, which in most instances coat the stomach and bowels in dyspepsia, and which must be removed before digestion can be restored. Occasionally this dose produces pain, and sometimes vomiting, from which the patient experiences benefit. No apprehension of bad consequences need be felt from the pain which this dose occasionally produces; it arises from wind or gas in the stomach, which may be relieved by taking No. 6, in very hot water, or by taking hot water alone; or essence of pepper mint: or it may be relieved by hot applications to the abdomen. The above preparation is more especially applicable when the tongue is coated. The No. 3 pills may be taken as a substitute for the bayberry tea and pepper.

Change of Air.—A change of residence from the city to the country, or from the country to the city, or removing to a different neighborhood, will in many instances restore digestion, when other means have all failed. I have observed the most remarkable change effected in dyspeptics by a few weeks residence in a pine country, or on the seaboard. The benefit which dyspeptics receive from visiting mineral springs, arises, probably, in the majority of cases, from the change of air, cheerful society, absence from care, and probably from the interruption of bad habits.

CLEANLINESS in person and in dress, promotes digestion, and exhilerates the mind. An occasional vapor bath, followed by a

shower bath, is one of the best means for promoting a healthy action in the skin. When the patient is languid and nervous, a shower bath every morning will prove a powerful touic to the nervous system, and in some instances will *cure* dyspepsia. The daily use of the flesh brush or salted towel will also invigorate the system, cheer the spirits, and promote digestion.

# WORMS IN THE STOMACH AND BOWELS.

#### SECTION XLIII.

In treating of worms, Dr. Thomson makes the following observations. "A great deal is said about worms causing sickness, and there is scarcely a disease that children are afflicted with, but which is attributed to worms. The doctors talk about worm complaints, worm fevers, worm colics, &c., and give medicine to destroy the worms; by so doing they frequently destroy their patients."

The views of Dr. Thomson concerning the cause of worms, to wit: That they are produced by a disordered state of the stomach and bowels, are doubtless correct.

DIFFERENT SPECIES OF WORMS.—There are,

1st. The Long Thread Worm, which varies from an inch and a half to two inches in length. About two thirds of its length is almost as thin as a horse hair, the remaining and posterior part being considerably thicker, terminating in a rounded or blunt extremity.

2d. The Maw or Thread Worm.—"This is a very small white worm—the male being not above two lines in length, with rounded or blunt extremity anteriorly, tapering to a point posteriorly. The female is considerably larger, being from four to five lines in length, terminating in an extremely fine extremity posteriorly, resembling the point of the finest needle. These worms

are found only in the large intestines, and principally in the lower part of the rectum, where they are often collected in almost countless numbers," occasioning a most annoying sensation of burning and tickling in the rectum.

3d. The Large Round Worm.—These are a species of worms varying in length from three to ten or twelve inches, and about the size of a common sized goose quill. These worms inhabit the small intestines, and occasionally ascend into the stomach. "The symptoms indicating their presence are equivocal, but are commonly considered to be—starting in the sleep, itching of the nose, irregular, or excessive appetite, emaciation, &c. Nevertheless, these worms are often suspected of being present where they do not exist."

4th. The Tape Worm.—The tape worm sometimes acquires a great length—thirty to forty feet, and even longer. "It is about half an inch in breadth, flat, white, and composed of a series of joints, resembling in shape a goard seed. It inhabits the upper portions of the bowels and stomach.

The Symptoms usually accompanying the presence of worms in the stomach or bowels are—paleness of the countenance, with occasional flushes on the checks, picking the nose, variable appetite, sometimes voracious—at other times entirely gone; offensive breath, copious secretion of saliva, and the tongue furred. The belly is swollen, and there are transient pains through the bowels, and starting in the sleep. These symptoms, however, may all exist, independently of the presence of worms, and even when there are worms, most of the attending symptoms may arise from a disordered condition of the stomach and bowels.

"The reason," says Dr. Thomson, "why children are more troubled with what are called worm complaints, is because they are more subject to be disordered in their stomach and bowels than grown persons. When children are sick, and their breath smells bad, it is said they have worms, and every thing is laid to them; but this is owing to disease caused by canker, for there is nothing in the nature of worms that can effect the breath. In cases of this kind, the only thing necessary is to cleanse the stomach by getting rid of the cold phlegm, and restoring the digestive powers, when there will be no difficulty with the worms."

The practice of giving poison to kill worms in the stomach and bowels, as Dr. Thomson says, "is like the story related by Dr. Franklin, of a man who was troubled with a weasel in his barn, and to get rid of the weasel he set fire to his barn and burnt it up." "I had the following relation," says Dr. Thomson, "from the doctor who attended the cases; three children had what he called a worm fever, and he undertook to kill the worms. One of the children died, and the doctor requested liberty to open it, to find out what would destroy worms, in order to know how to cure the others; but the parents would not consent. A second died and the parents consented to have it opened; but after searching the stomach and bowels, to their suprise; no worms could be found. The third soon after died. The fact was, their death was caused by canker on the stomach and bowels, and the medicine given increased the difficulty by drawing the determining powers inward, which aided the cold to promote the canker."

TREATMENT.—The difficulty of ascertaining whether a child that is sick has worms, should occasion no embarrassment with regard to the treatment to be pursued. The stomach and bowels being disordered, the indications for the treatment will be the same, whether the patient be affected with worms or not.

"I have had," says Dr. Thomson, "a great deal of experience in what are called worm complaints; and, after having become fully acquainted with the real cause, had no difficulty in curing all that I have undertaken." \* \* \* \* \* \* "My practice," says he, "has been what I recommend to others to do in cases that are called worm complaints: to give the composition powder or No. 2, to warm the stomach, a tea of No. 3 to remove the canker, and the bitters, or either of the articles described under No. 4, to correct the bile. If they are bad, carry them through a course of the medicine, and give the bitters. When there are nervous symptoms, give the nerve powder. Injections should also be frequently given. The butternut syrup is very good. If there should be danger of mortification, make use of No. 6, both in the medicine given and in the injections."

The composition I have found to be most effectual when the powder is given in luke-warm water, or in a strong decoction of

bayberry or sumac. This mixture given two or three times a day, together with small doses of the tineture of lobelia, repeated every two or three hours, will, in many instances, remove all symptoms supposed to be occasioned by worms.

The compound lobelia pills given immediately after meals, will be found beneficial in such complaints, and they may be used as a

substitute for the composition and tincture of lobelia.

A mixture of vinegar and salt given three or four times a day, is of especial benefit in correcting a disordered stomach, especially when the patient craves acids.

Milk boiled with a portion of tansy may be used to restore digestion; and sometimes it will cause the expulsion of worms from the bowels.

LIME WATER.—When the stools are green or of an acrid character, or if the patient be affected with sour breath, and acid eructations, lime water should be given to correct the secretions. The usual way of administering lime water is to add about an equal quantity of boiled milk. To be taken two or three times a day.

Charcoal.—When the bowels are constipated a teaspoonful of purified charcoal may be taken two or three times a day in boiled milk. This will overcome costiveness, and it is highly beneficial in the cure of what are called worm complaints.

EMETICS, OR A COURSE OF MEDICINE, should be given occasionally, as long as there is fever, or the tongue continues furred, and composition powder, capsicum, or spice bitters, to be administered twice or three times daily. When the fever has disappeared, and the tongue is moist and cleaning, bitters may be given. When the patient continues in delicate health, after the above treatment, a cold shower bath in the morning, or a change of air, will be found particularly useful. A change of medicine occasionally will be proper in long standing cases; thus a certain kind of bitter may be given for a few days in succession, and then change it for another; salt and vinegar may agree with the stomach for a time, and then require to be laid aside for some other remedy.

WORM SEED, OR JERUSALEM OAK, (Chenapodium Anthelmenticum,) is much used for expelling worms. Of the efficacy of this

article I cannot speak from observation, never having used it. The *Volatile Oil* of the worm seed is generally used; the dose for a child is from four to ten drops mixed with sugar, and given in the morning on an empty stomach, and in the evening at bed time, which may be continued several days in succession.

TREATMENT FOR THE REMOVAL OF THE MAW OR THREAD WORM. This species of worm being located in the rectum, is usually termed seat worm. These may be removed by the daily administration of injections, composed of a strong decoction of bayberry or sunac, adding a teaspoonful of No. 6. After the worms are expelled the injections should be administered every few days to prevent their return. If the general health be deranged, constitutional treatment will be required. Such as the daily use of stimulants and bitters, and occasionally an emetic, or a full course of medicine.

These small worms are contained in a tough mucous, lining the bowels, and being imbedded in it will frequently resist the most powerful cathartics, but administering stimulating injections, to excite the secretions and render them less dense and tenacious, and followed by the use of injections of a strong decoction of bayberry or sumac, adding a portion of No. 6, will seldom or ever fail of expelling the worms when their use is persevered in. In obstinate cases of seat worms, an injection of a simple decoction of the bayberry or sumac should be administered at bed time, and retained in the bowels through the night, and in the morning administer another, containing a portion of the No. 6, or the third preparation of lobelia.

TREATMENT FOR EXPELLING TAPE WORMS.—Every species of intestinal worms, is supported by the cold mucous or "canker" lining the bowels. Dr. Thomson's general plan of treatment, namely: first to give stimulating medicine to warm the stomach and bowels; then use the No. 3 to remove the "canker," and bitters to restore digestion, is adapted to all cases of worm complaints. This is a plan of treatment adapted to all cases of disease of the stomach and bowels, whether worms be present or not.

No small amount of injury has been done by experiments that have been practiced by physicians upon patients supposed to be

affected with tape worm. A great variety of remedies and modes of treatment are recommended by different medical writers; one claiming to have been successful in expelling tape worms by a certain method of treatment; whilst another declares that a different and even opposite course of treatment has proved more successful in expelling the worms. Dr. Eberle gives no less than seven different plans of treatment recommended by men who have been considered eminent in the profession. Most of the remedies employed by the medical profession for the expulsion of tape worms; such as tin filings, and irritating cathartics, frequently cause the formation of a false membrane on the mucous surface of the bowels, which will sometimes pass off in the form of a white skin, in pieces varying from half an inch to a foot, or even two or three feet in length, and this substance no doubt has frequently been mistaken for tape worm. Some writers speak of having cured many hundred cases of tape worms, but probably in fortynine cases out of every fifty, the supposed tape worm was nothing more than the white skinny substance above alluded to.

## PILES.

### SECTION XLIV.

This is a disease of the voins of the rectum, which prevails to a great extent in both sexes, and in all classes of society.

Piles commence by an enlargement of the *veins* in the rectum, forming tumors filled with dark blood, which become extremely painful on going to stool, and frequently they discharge a considerable quantity of blood; they are then called *bleeding* piles. When blood is not discharged they are termed blind piles. Sometimes the tumors emerge from the anus, forming *external* piles; when confined within the rectum they are denominated *internal* piles.

1st. External Piles.—These are at first formed within the rectum, by the blood collecting and forming into clots in the enlarged veins, and are afterwards forced down by the passage of hardened fœces, and by straining efforts to evacuate the bowels, attended with extreme pain, in some instances for many hours. Piles are soft at first, but generally become harder in the course of a few days.

When the disease continues for a considerable time, a portion of the intestine is forced down every time that feeces are passed from the bowels, and requires to be pressed up by the hand. In some instances the patient will be unable to return the protruded intestine, in consequence of the inflammation and extreme tenderness of the parts. Under these circumstances the patient is compelled to remain in a recumbent position, being unable to walk or even to sit upright. The extreme pain which sometimes continues for many hours after the bowels have been moved, is caused by the piles being pushed down, and when the sphincter muscle of the rectum contracts, it grasps them firmly, and thus operating as a ligature upon them, occasions intense pain.

- 2d. Excrescences in the form of whitish fleshy bodies are apt to be formed around the verge of the anus, in consequence of frequently repeated inflammation of the diseased veins, by which their sides, as it were, are glued together, and adhesive matter is thrown out, which becomes organized, and a hard vascular swelling is produced. These excrescences are apt to occasion irritation and chafing of the parts, and although containing numerous blood vessels, they may be cut away with a pair of sharp scissors, without the least hazard to the patient.
- 3d. Internal Piles may exist far in the rectum, without occasioning pain, or much inconvenience, the discharge of blood being the first symptom of their existence. By the frequent passing of hardened feeces, a relaxed condition of the bowels, or by the use of purgative medicine, the intestine is gradually drawn downward, and finally is protruded beyond the anus every time the bowels are moved, forming prolapsus ani. Under these circumstances there is generally much constitutional derangement and more or less fever.

Piles on their first appearance seldom continue for a long interval, they disappear and sometimes do not return, but more generally they return at intervals, until finally the parts become permanently diseased, proving a continued source of annoyance and frequently causing severe pain.

When a number of piles exist low down in the rectum, the passage of hard fœces is rendered extremely difficult and painful, in consequence of the cavity of the intestine being nearly closed by these tumours being formed into a body near the orifice of the rectum.

"Among the most common consequences of piles is a kind of tenesmus, with a protrusion of the inner tunic of the rectum, so as to form a prominent and extremely sensitive ring around the anus, particularly after each attempt to expel the fœces."

Piles are very liable to burst, followed by a discharge of blood, on which the tumours disappear, and the distressing symptoms abate until other piles are formed, which also burst, and their contents are discharged; and in this way some patients will be subjected to frequent discharges of blood, which may become so profuse as finally to weaken and impair the general health.

Causes of Piles.—The free use of purgative medicines may be regarded as the most common cause of piles. They may, however, be produced by any cause that weakens the digestion, or occasions an obstruction to the free circulation of blood through the veins of the rectum; such as venerial excesses, the intemperate use of ardent spirits, sedentary habits, long continued diarrhea, dysentery, tight lacing, gravel in the bladder, lifting heavy weights, pregnancy, difficult labors, obstinate costiveness, obstructions in the liver, and disease of the lungs.

TREATMENT.—In the early period of the formation of piles, the use of injections of some active astringent, as a strong decoction of bayberry bark, dewberry root, sumac, or witch hazle leaves, will relieve the symptoms, and may check a further development of this anoying complaint.

When violent pain attends the piles, relief may be obtained by the patient sitting over steam, or by the application of a warm poultice, composed of slippery elm and lobelia moistened with SIG. BB.

warm water. Besides these applications, the patient should drink freely of composition or bayberry tea, with the addition of a portion of capsicum. This will, in some degree, counteract an undue determination of blood to the rectum. An emetic will commonly relieve the pain when the above means fail, unless the disease be of long standing. Although the pain may be increased during the efforts to vomit, yet the circulation of the blood will soon become more equalized through the system, and the pain thereby mitigated. The excitement occasioned by the piles, causes an undue determination of blood to the rectum, which may always be counteracted to a greater or less degree by the influence of a prompt emetic of lobelia, more especially when aided by the administration of a vapor bath.

During the past two years I have attended many patients affected with piles, and some of them were cases of long standing, and have invariably succeeded either in curing them, or in affording signal relief to the patient by the use of injections, prepared by steeping in boiling water, a compound of aspen poplar bark, bayberry powder, and witch hazle leaves. The decoction should be strained, administered luke warm, at bed time, and retained until morning. Patients will find no difficulty in retaining this injection, as it contains no stimulant to excite the peristaltic action of the bowels. An injection retained through the night will commonly cause an easy movement of the bowels in the morning. even in the most stubborn cases of constipation. The injection must be repeated every night until a cure is effected. Besides the above treatment, I have usually prescribed the compound lobelia pills, a course of medicine when the system is much disordered, together with bitters to restore digestion.

Dr. Thomson, in his Gnide to Health, mentions the case of an "elderly man, in South Reading, who had been confined to his bed for seven weeks with the piles, and seven doctors had attended him before I was sent for, and he had continued to grow worse. The doctors had operated on one side, and said they must on the other; it was their opinion, as well as his, that he was in a decline. The side they had operated upon was much worse to cure than the other. I carried him through a regular course of the

medicine twice in three days, when he was able to go out of doors. The injections were composed of No. 3, steeped, and a small quantity of No. 2 was used; warm tallow was applied several times a day; and occasionally the parts were washed with the above tea. He had been dieted very low; I restored his digestive powers, his appetite returned, the sores healed, and his general health amended to such a degree, that he was no more confined with that complaint."

Injections prepared and used as directed in a former paragraph, retained through the night, have in some instances entirely checked the discharge of blood from piles, where the bleeding had previously returned at frequent intervals for a period of several years, the wan appearance of the patients showing how much they suffered from the excessive loss of blood. I have always found it necessary in such cases, to give stimulants and bitters, and sometimes a course of medicine.

External piles that remain soft may be lessened, and sometimes dispersed, by washing frequently with a tincture of bayberry, or by applying some ointments containing astringent properties: for instance, witch hazle, or sumac leaves, or rhattany root stewed in tallow or mutton suet, adding a small portion of beeswax to render it more adhesive. If external piles should continue until they become hard, they may be punctured by the point of a lancet, and the clot of blood must be squeezed out, and the parts washed with tincture of bayberry, and then ointment or tallow applied. It is easy to distinguish between piles, and those fleshy excrescences which sometimes form about the margin of the anus: piles have a dark livid appearance, whilst fleshy excrescences have a light color, and feel spongy.

Excrescences.—These are small bodies of fleshy appearance, sometimes varying from half an inch to an inch and a half in length, and being well supplied with blood vessels and nerves, they sometimes become a source of great annoyance.

"The mode in which these excrescences are produced is as follows: The inflammation of the piles glues the sides of the veins together; adhesive matter is thrown out, which becomes organized, and a hard swelling, in which there is a number of vessels, is produced. The excrescences project from the surface a little way up the anus, which is chafed and rendered extremely irritable from this cause. These excrescences are easily removed by a pair of sharp scissors, or applying a ligature very tightly, so as to obstruct the circulation. The latter method is much more painful than excision.

When a portion of the intestine protrudes every time the bowels are moved, the injections previously spoken of will prove the most effectual means of curing the disorder.

DIET.—This is of the first importance in severe cases of piles, attended with obstinate constipation of the bowels. When the passage through the bowels is greatly obstructed by piles, and the parts are highly sensitive and painful, the diet must consist of such articles of food as are most likely to prevent costiveness, such as gruel made of unbolted wheat flour, or bread made of the same material, rye mush and molasses, or cream, Indian mush and cream, stewed prunes in small quantities, eaten with stale bread or biscuit. Ripe fruit, calves' foot jelly, &c.

## RHEUMATISM.

### SECTION XLV.

The origin of this form of disease may be traced to constitutional disorder, and loss of vital power.

Cold and dampness are the exciting causes of rheumatism in almost every instance. Where, however, there is a strong predisposition to the disease existing, inaccuracies in diet, over exertion, loss of rest, or any other depressing influences may occasion the disease. I never knew a case of rheumatism that was not preceded, or accompanied by a greater or less degree of derangement in the digestive power. Patients, however, will sometimes insist that nothing is wrong about the stomach or bowels. The low de-

gree of sensibility in the stomach and bowels induces patients to consider that no derangement exists in these organs, when, at the same time, their functions may be so far depressed and deranged, as to give rise to the most painful affections in other parts of the system, as gout, rheumatism, headache, neuralgia, erysipelas, &c.

Parts Affected.—Rheumatism generally attacks the larger joints, the hip, shoulder, elbow or knee, and frequently the small joints become affected, more especially those of the fingers and toes. The head, heart, and brain are also liable to this form of disease.

VARIETIES.—When rheumatism attacks the young and athletic, the disease is usually accompanied with inflammation of the diseased parts, attended with swelling, extreme tenderness, and frequently a redness of the skin, and generally there is more or less fever, especially at night. Such a case would be termed acute or inflammatory rheumatism. When the disease occurs in the aged and infirm, and especially in those of broken down constitutions, the powers of nature are too feeble to establish an efficient curative action, the affected parts will remain pale, and seldom much swollen; the disease will be fixed in certain joints and not shifting about; there will be absence of fever and thirst, and the affected joints much less tender than in the former variety. This is called *chronic* rheumatism. The symptoms, however, in different cases, present great diversity of character, from the most acute and inflammatory to that of the lowest grade of chronic rheumatism; so that in some instances it will be difficult to decide whether to call the disease acute or chronic.

Mercury sometimes occasions disease of the joints resembling rheumatism, and it also affects the membrane that covers the bone, and is most apt to be seated on the long and flat bones—the tibia or shin bone, the arm bones, shoulder blade, skull, &c. Sometimes it commences with a protuberance rising on the bone, without inflammation or pain, and either remaining stationary, or gradually disappearing under proper treatment, or, as is more commonly the case, the part becomes extremely painful, and is frequently followed by suppuration. This disease is not always confined to the covering of the bone, but occasionally the sub-

stance of the bone itself is diseased, occasioning its decay, attended with a discharge of acrid and offensive matter.

SYMPTOMS OF THE ACUTE OR INFLAMMATORY VARIETY .- The disease generally approaches in a gradual manner, with a sense of coldness or numbness in the limbs, loss of appetite, weakness and languor. These symptons continue for several days, or even weeks, in some instances, before reaction takes place, and the parts become either swollen, painful, or inflamed. Pain, tenderness, with a slight degree of swelling and redness of the joints, characterize inflammatory rheumatism. "The patient generally lies on his back, and avoids every motion of the body or limbs; or if he does move, he experiences a sudden aggravation of pain; he cries out, and muscular motion is promptly checked. There is little languor or debility, and but little disturbance of the mental faculties." The tongue is thickly coated, and there is usually perspiration on the face, and frequently on the whole body, which is acid, and exhales a peculiar odor. The urine is acid, and deposits a sediment, especially as the disease declines. The pain and distress is more aggravated at night, frequently attended with fever, and sometimes slight delirium: or as it is usually expressed, the patient is "light headed." In some instances all the limbs are affected at the onset, the patient being almost helpless. In other cases the disease is confined first to the lower extremities, and then sooner or later it extends to the shoulders, neck, elbows, and hands. If the patient fall to sleep he is apt to be awakened by a sudden jerk or contraction of the muscles, causing severe pain.

The functions of the *liver* are in many instances conspicuously disordered in rheumatism, attended with sallowness of the skin, whites of the eyes, and occasional sickness and vomiting of bile. After a spell of vomiting, the patient experiences temporary abatement of the rheumatic pains. Although bile be thrown off by vomiting, it does not prove that there is an unusual quantity formed; digestion being suspended or greatly impaired, the usual quantity of bile is not used in the process of digestion.

Not Dangerous.—Rheumatism rarely proves fatal, except when seated in the brain, or translated to the heart, or other important internal organs.

DURATION OF THE DISEASE.—The length of time required for the cure of rheumatism, varies in different cases, from a few days to several weeks, and even months. Inflaminatory rheumatism is universally admitted to be more easily cured than chronic. Inflammation is the curative process by which nature overcomes the disease, and when the inflammatory action subsides without affecting a crisis, or the vital powers are prostrated by blood-letting, purging, or the use of nitre, antimony, &c., the disease is fixed in the system, and receives the name of chronic rheumatism. "Some practitioners," says Dr. Willan, "continue to let blood in most cases of acute rheumatism, thinking themselves justified in their mode of practice by the sizy appearance of the blood. The same principle might lead them to empty the whole sanguiferous system; for every time blood-letting is repeated, the blood becomes more dense or sizy. I have further observed that, by bleeding repeatedly, the pains, swellings, and febrile symptoms, were not only aggravated at the time, but often protracted infinitely; at least, I have seen them continue, under such a mode of practice. upwards of two months."

TREATMENT OF RHEUMATISM.—It is admitted by the opponents of Thomsonism, that the Thomsonian practice is suited to the cure of rheumatism. Experience has fully tested the insufficiency of the regular practice in the cure of rheumatism; and that in many instances, where this practice has failed, the disease has been cured by the aid of warm weather alone.

The Constitutional Treatment is to be conducted upon general principles, with this great point always in view, namely: to aid nature in her efforts to restore the diseased parts to a healthy condition. Vitality being weakened, the treatment must be adapted to cleansing the stomach and bowels; to "ripen and remove the canker;" to support the "internal heat," and to restore digestion.

In general capsicum is the best stimulant. It may be taken in tea or in pills, or in combination with composition, or bayberry. Pills composed of equal quantities of capsicum and lobelia, are especially beneficial.

Lobelia.—Besides pure stimulants, broken doses of lobelia

should be given, sufficient to excite slight nausea, in order to produce some degree of relaxation. The above pills answer a good purpose, two or three of which may be given every hour or two. The lobelia may be given in various forms, in pills, tea, powder, tineture, or in the third preparation. Lobelia and pepper are particularly indicated in the first stage of the disease.

A Course of Medicine, early administered, before the disease becomes seated, will in some instances effect a crisis, provided the patient be kept warm in bed, and use be made of stimulants to continue perspiration. Upon the degree of integrity of the general health retained, depends, in a great measure, the rapidity of the eure. Thus, if the digestive powers be greatly prostrated, or if there be chronic disease of the liver, the treatment will require to be continued for weeks, in many instances, before the rheumatism can be cured. The parts affected in rheumatism possess a low degree of vitality, and when they become diseased, so as to occasion inflammation, it is usually very slow in its progress to a favorable termination.

When the patient can be got out of bed without eausing great pain, and can bear to sit up, the full course of medicine should be given, either daily or at intervals of several days, as the case may seem to require.

When, however, the disease has become seated, and the patient cannot be moved without great pain, and more especially during the early period of the disease, emeties may be given without the bath, for, in some instances, it is better for the patient to be kept at rest, with a moderate and regular heat around him, than to have the inflamed parts aggravated by getting out of bed, and by frequenty changing the clothing. When the skin is dry and hot, external dry heat may cause the patient more distress, and an increase of pain. The chamber is sometimes too cold to admit of the exposure of the patient's body to the air, and under such circumstances the steaming may be dispensed with.

THE VAPOR BATH.—There is a period in rheumatism, or a certain condition of the system, when the vapor bath will prove most signally benficial; under other conditions of the system it is

apparently of but little benefit, the relief afforded being only momentary. As a general rule it is the most effectual, either before the disease becomes firmly seated, or whilst it is forming a crisis, or after it has reached its height, and also on its decline. In most cases, however, it is beneficial in all stages of the disease, provided the patient can be moved without great pain.

The patient should be showered after steaming, or washed with spirits of vinegar, rubbed dry, and the surface bathed with stimu-

lating liniment, No. 6, or pepper sauce.

Emetics aid very much in bringing the disease to a crisis. I have found a prompt emetic, either with or without a previous steaming, to afford more relief than any other remedial means. I attended a young man a few months after his arrival in this country, from England, who was taken down with rheumatism. He soon became almost entirely helpless, with great pain, and redness, and swelling in his joints. The tongue was heavily coated, and the skin pale and relaxed, with an occasional flush on one or both cheeks; generally with perspiration on the face and body emitting a sour smell. I gave this patient a teaspoonful of the liquid of the third preparation of lobelia, in a teacup half full of bayberry or No. 3 tea, about every two hours, and continued the use of it for two weeks, when the tongue began to clean, and the soreness to abate. He was then steamed every day, and recovered rapidly. Sometimes the medicine would produce no sickness, except once or twice a day, when vomiting would come on, by which he always obtained relief. I do not say that this patient might not have been cured sooner by thorough courses of medicine, but the season of the year, and the situation of the room, prevented it. I have not mentioned this case as an extraordinary one, but merely to point out a course of treatment that may be pursued where the regular course cannot be given. In many cases I have found the compound lobelia pills effectual, given in doses of from three to four every two or three hours.

In the early stage of rheumatism, it is important to relax the system, if the inflammatory action be very high, or the patient feverish; not however to break down the curative action, but to remove a part of the difficulty against which nature is struggling.

Injections may be used as the state of the bowels seem to require. When the rheumatism is principally seated in the lower extremities, injections of the third preparation, or of some form of lobelia, in the No. 3 tea, are especially indicated. The circulation in the lower extremities is, to a greater or less degree, influenced by stimulating injections.

The parts affected by rheumatism possess a low degree of sensibility, and when they become so much diseased as to excite reaction and occasion inflammation, it frequently requires several weeks before the parts are restored to a healthy condition, even under the most judicious and persevering course of treatment. The condition of the stomach, bowels, and liver, influences, in a great degree both the violence and duration of the rheumatism.

Case.—Mr. J.—, whose health had been feeble for two or three years, attended with sallowness of the skin, was attacked with rheumatism, so as to be helpless. I was applied to, and administered two courses of medicine, with marked benefit at the time, but he soon relapsed. I gave it as my opinion to the patient, who was a man possessing high intellectual attainments, that there was a false membrane coating his stomach and bowels throughout, which must be removed by a persevering course of treatment, before the rheumatism could be cured. Discouraged at not finding more permanent relief from the operations he had undergone, he determined on making a trial of the regular practice. Colchicum, and a great variety of other remedies were used both internally and externally, but with no good result, but on the contrary, with a manifest exhaustion of strength. I received a message requesting me to call on Mr. J again. I found him evidently worse than when I left him. He said he had become convinced that what I had previously told him in regard to the false membrane was correct, and desired that a thorough course of treatment should be pursued until the stomach and bowels should be cleared of this false membrane. Accordingly a thorough course of treatment was pursued, and in about two weeks the false membrane began to be discharged, sometimes passing from the bowels in pieces a foot long. At the end of three weeks the patient was cured, and has ever since enjoyed better health than during several previous years.

When a joint is distorted by rheumatism—for instance, the foot turned in, or the wrist bent, drawing the hand down, or side wise, the case is generally very slow to recovery.

When rheumatism becomes deeply seated, requiring a long course of treatment, it will be advisable occasionally to change the medicines, or at least to alter the form; or to combine them variously. Besides the remedies already noticed, may be mentioned, gum guaiacum, balsam copaiva, oil of juniper, and white mustard seed. Simple herb teas are frequently found beneficial in promoting perspiration.

The gum guaiacum is to be pulverized and taken in molasses. The dose an even teaspoonful two or three times a day. The balsam copaiva may be taken in doses from fifteen to twenty drops, first rubbed up with a teaspoonful of slippery elm and sugar, with the addition of a little water. This should be repeated three or four times a day. The oil of juniper is to be prepared and taken in the same way.

The dose of the white mustard seed is a tablespoonful two or three times a day.

I have known rheumatic patients to be benefited by eating raw onions, more especially in chronic cases.

The compound lobelia pills are well adapted to all cases of rheumatism; and on account of the facility with which they may be taken, they will generally be preferred to decoctions. In many instances I have succeeded in curing rheumatism by a free use of the above pills, together with an occasional course of medicine. After a course of medicine, diluent drinks should be given with a view to continue a moderate perspiration. A weak infusion of bonesett, chamomile, or elder blossoms, or a tea of composition, spice bitters, ginger, or capsicum, may be used as the nature of the case may require, or the fancy of the patient dictate.

Tonics should be used when the disease is on the decline, and the patient clear of fever. More particularly are tonics indicated when the system is in a weak and relaxed condition. Where the case requires the continued use of tonics, they may be changed occasionally with advantage. Various kinds of tonics may be used, such as aspen poplar, peruvian bark, guiac shavings, columbo, balmony, quassia, golden seal, or garden bitters, as wormwood and tansy. They may be prepared in decoction or in tincture. Thomson's No. 6 is also a good tonic.

The Diet in rheumatism, as in every other disease, should be adapted to the condition of the digestive powers. In the acute or inflammatory form of the disease, digestion is in general either suspended or much enfeebled, requiring the lightest kinds of food, such as crust coffee, barley water, elm gruel, toast and tea, milk porridge, &c. When a patient is suffering acute pain, the digestion is imperfect, and when the stomach is oppressed with food that it cannot digest, the rheumatic pains will be necessarily aggravated.

In a more advanced period of the disease, or when it becomes chronic, a stronger diet may be required, such as soft boiled, or poached eggs, stale bread and butter, moderate quantities of fresh beef, roasted or broiled, mutton, wild game, together with wholesome vegetables. In some cases animal food agrees with the stomach, and in others an almost exclusive vegetable diet will be most proper.

LOCAL APPLICATIONS.—There is probably no form of disease in which so many different local applications have been recommended as in this. In some instances local applications are serviceable, and in others they prove entirely useless. And again, an application that agrees with one case, will increase the pain in another; and the same application that may ease pain in one stage of the disease, may prove entirely useless, or even injurious at another period. Thus, raw cotton, bound on an inflamed joint may excite perspiration and relieve pain in one, and in another it will increase it. Many will find relief from warm poultices, whislt in others the pain will be aggravated by them. In general, warm poultices and volatile liniments are beneficial. Thomson's No. 6, with a portion of camplior, or four parts of No. 6 to one of spirits of turpentine, will be particularly useful in many cases. Two ounces of olive oil, mixed with half an ounce of "water of ammonia," form a volatile liniment, applicable in the acute or inflammatory

stage of rheumatism. The stimulating liniment frequently alluded to in this work, prepared by my brother, A. Comfort, is one of the best external applications for rheumatism that I have ever made use of, and generally answers in both the acute and chronic forms of the disease. After rubbing the parts well with the liniment, they should be bound up with flannel or silk oil cloth.

The following poultice is highly recommended by some who have used it:

Take of slippery elm, four ounces; wheat bran, four ounces; capsicum, one ounce; brown lobelia, one ounce; fine salt, two tablespoonfuls; soft soap, half a pint.

Mix these together, and sufficient warm water to make into a proper consistence for a poultice, and apply it. The poultice must be wet occasionally to prevent it from becoming dry and hard. Dr. Shaw informs me that he used this poultice with the most marked success, in a case of chronic rheumatism. After applying the poultice some time, ulcers were formed on the surface over the diseased parts, but which healed under the repeated application of the same poultice, and the joints were rapidly restored to a more healthy condition.

In some instances the pain and inflammation will fix upon a part for a day or two and then suddenly change to another place, and in this way will fly from one limb to another; and a part that will be extremely painful, red and swollen, and tender to pressure, may, in the course of a few hours, be entirely free from inflammation or pain. I attended a gentleman recently affected with acute rheumatism, where warm applications, except steaming, increased the pain, and where almost instant relief was found by applying a cold poultice, made of grated raw potatoes: the disease in this case was confined principally to the feet, not affecting the larger joints.

In deep seated cases of long standing, sea bathing, cold shower baths, or travelling over a mountainous country will sometimes effect a cure.

When rheumatism attacks the brain or heart, or other internal organs, the treatment must be thorough in the commencement, for if the disease become firmly seated, particularly on the brain,

it will sometimes terminate fatally, although the most vigorous measures may have been perseveringly employed. Rheumatism very rarely, however, becomes translated to internal organs under the use of Thomsonian remedies, but it is not an uncommon occurrence under a depleting course of treatment. Almost every writer on medicine furnishes testimony to the danger of copious bleeding in rheumatism, from the liability of the disease being thereby translated to the heart and other internal organs.

During the past winter I attended a young man with a severe attack of pericarditis, or rheumatism of the heart. The patient was seldom able to lie down except after a vapor bath and an emetic, but would sit all night in a bent posture, experiencing severe pain from efforts to cough, or to take a deep breath; the pulse was irregular and extremely feeble; there was great oppression of breathing, and the voice low and very feeble; the pain was seated in the region of the heart, the limbs were all affected with rheumatism and his feet very much swollen. In this case I found no other means so effectual as a course of medicine. The bowels were obstinately constipated, and seldom moved by injections. This patient recovered in the course of a few weeks, under a general stimulating treatment, together with an occasional vapor bath and an emetic. As in all cases that I have attended of seated disease, a false membrane was passed off from the bowels, and flakes of it were frequently thrown up by vomiting.

# LUMBAGO—RHEUMATISM IN THE LOINS.

## SECTION XLVI.

This form of rheumatism is to be treated upon the same general plan as that recommended for rheumatism, namely: by courses of medicine; pure stimulants; astringent, or "canker medicine," and finally by tonics.

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Twenty or thirty drops of the spirits of turpentine, three or four times a day, is an effectual remedy in many cases of lumbago. The use of the turpentine, and an occasional vapor bath, together with a strengthening plaster to the back, may succeed in curing light cases. The stomach and bowels, however, are in most instances disordered, and require a course of medicine, and the use of stimulants, such as capsicum and composition, prickly-ash, No. 6, &c.

PRICKLY-ASH.—This medicine in decoction, taken freely, is decidedly useful in chronic rheumatism wherever it is located. The prickly-ash, finely pulverized, may be added to the spice bitters in the proportion of one part of the former to four parts of the latter.

# GOUT.

### SECTION XLVII.

Gout is a constitutional disease, being always connected with a disordered state of the digestive organs. The disease usually comes on by fits or paroxysms, and the attacks in most instances occur at night. The pain is generally seated in the ball of the great toe, though it is liable to attack other parts of the limbs, and also internal organs, namely: the stomach and kidneys.

Its hereditary tendency.—Some families are peculiarly predisposed to gout, almost every member of a family being more or less affected by it in advanced life, when the digestive powers usually fail. This hereditary tendency to gout may be transmitted from parents to children, through several generations. The same debilitating cause that would produce gout in one predisposed to the disease, might occasion pleurisy, erysipelas, or some other form of disease, in another.

Not confined to the luxurious and indolent.—Gout, though principally occurring in those who have "feasted and drank abun-

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dantly," still it does occasionally attack individuals who have lived temperately, and have led an active life. In every case of the kind, however, that I have had a knowledge of, the patient was dyspeptic, and had a sallow complexion, indicating a torpid state of the liver.

Causes.—When there is a predisposition to gout, an attack may be brought on by almost any debilitating cause, such as exposure to cold or dampness, over exertion, or taking more food into the stomach than can be digested, thus causing debility of the general system. The disease is most apt to occur in persons of a peculiar confirmation of body, with alimentiveness large, and who are habituated to eating largely of the richest kinds of food, together with the free use of wine and brandy. At length the digestive powers become enfeebled. The habit of eating heartily having become established, more food is taken than the stomach can digest; the imperfectly digested food forms acids, the general system becomes disordered, and gout follows.

When this disease attacks individuals who lead an active life and are temperate in their habits, it is owing to constitutional disorder; the general health being more or less impaired previously to the gouty attack.

THE ORDINARY SYMPTOMS of constitutional disorder which generally precede an attack of gout, are, uneasiness and distress at the pit of the stomach; frequent belching of wind; sour cructations; furred tonge; a sense of tightness and weight in the abdomen; "giddiness; great lassitude; yawning, and stretching of the limbs; cramps in the muscles of the legs; drowsiness, with disturbed sleep, depressed spirits, and debility. In some instances a disagreeable itching of the skin comes on a few days previous to the attack, and in most cases the urine has a deep red color." Coldness of the extremities, with a sensation of numbness, is very often experienced before an attack of gout.

Characteristic Symptoms.—In most instances an attack of gout commences at night. It is attended by severe pain, tenderness, and throbbing in the ball of the great toe; chilliness, or rigors, soon followed by reaction; the skin becomes hot and dry, and the pain violent and throbbing, as though there was a con-

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tinued succession of electric shocks passing through the tender part. At the approach of daylight the pain abates, and a profuse perspiration ensues. "In some instances the pain and fever continue with unabated violence, until about the middle of the following night, when they decline under a moderate flow of sweat, the patient sinking into a quiet sleep towards morning. In very severc attacks, however, no obvious remission of the symptoms takes place, until the third or fourth morning. Yet in all instances, the sufferings of the patient are greater during the forc-part of the night than in the day. When the affected part is examined in the morning, after the accession of the paroxysm, it is found swollen, red, and the veins of the foot greatly distended with blood." The tenderness is so great, that the least pressure or motion in the part, occasions excruciating pain. The temper, during the paroxysm, is irritable, the patient being difficult to please.

The duration of the first attack of gout, varies from four or five to eight or nine days; "but in subsequent attacks, it is often protracted beyond the second, or to the end of the third week. After the disease has subsided in one foot, it sometimes attacks the other, and passes regularly through its course as in the first instance.

After an attack of gout the general health of the patient is usually much better than it was for some time previous to the attack. The disease however returns at longer or shorter intervals, in some instances only once in a few years—in others every year, and after the constitutional energies become greatly enfeebled, the patient will seldom be entirely clear of it, except during mid-summer.

Chronic Gout.—From great exhaustion of constitutional energy, gout is apt to assume the chronic form, and instead of occurring in paroxysms at different periods, the parts become permanently affected, not with acute inflammation, but by "chronic wandering, and irregular pains, bearing much resemblance to chronic rheumatism."

"The pain in chronic gout is usually moderate during the day, the patient experiencing only a sense of alternate heat and coldsig. DD. 242 согт.

ness in the affected parts; at night, however, it is generally severe and aching. A feeling of numbness and weight is experienced in the diseased parts, and slight cramps are apt to occur during the fore part of the night, and the sleep is restless, and interrupted by sudden startings. The affected joints retain their natural, or present only a slight purplish hue; but they become ædematous, tender, and more or less stiff, and the neighboring muscles are weakened or diminished in size. The inflammation often passes successively from one joint to another, or leaves its original seat, and fixes upon some distant joint, and after having remained there for a while, returns to the part it had left."

"There is rarely any very conspicuous fever, but the digestive and biliary organs are generally very permanently deranged. The dyspepsia attending this form of the disease is particularly characterized by great oppression, and flatulent distention of the stomach after a full meal, together with heartburn, and occasionally a sense of coldness in the stomach. The bowels are usually torpid or affected with mucous diarrhea; the urine is turbid, and often charged with mucous; the skin dry, contracted, and sallow; the bilious secretion deficient; and both the animal and vital functions much impaired. The temper in this variety of the disease is always very irritable, dissatisfied, morose, irresolute, and sometimes gloomy or hypochrondical. In some instances, pain is occasionally felt in the kidneys, or neck of the bladder, and generally matter is discharged with the urine."

Gout is not exclusively confined to external parts, but is liable to attack the stomach and other internal organs, and also the brain. Cold applications to the diseased extremities, copious bleeding, continued active purging, or any other debilitating influence may occasion gout to be translated to internal parts. "When an acute attack of gout passes to the brain, furious delirium, or symptoms of apoplexy, speedily ensue." When it fixes upon the stomach, violent cramps or spasms of this organ ensue, which in many instances terminate fatally, or reaction becomes established exhibiting symptoms of inflammation in the stomach.

Treatment.—A paroxysm of gout will require the same general plan of treatment as any other violent attack of disease.  $\Lambda$ 

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course of medicine will relieve the violence of the symptoms and assist in bringing about a crisis.

In the premonitary stage before the reaction or pain comes on, a course of medicine will lighten the severity of the pain, and shorten the paroxysm.

TREATMENT DURING THE PAROXYSM.—An attack of gout should be treated in the same manner as a case of bilious colic, or inflammatory rheumatism; applying the remedies as the urgency of the symptoms may require. The bowels to be relieved by the use of enemas; the system warmed by the vapor bath, and the stomach cleansed by emetics. During the paroxysm, the vapor bath may be administered frequently, provided the patient finds relief from it.

EMETICS.—Free vomiting will sometimes relieve the pain after all other usual means have failed. After vomiting, the patient should take capsicum tea freely, or a teaspoonful of the third preparation of lobelia, in a tea cup half full of composition or bayberry tea, frequently repeated. In very severe cases I have found it necessary to repeat the above named doses at intervals of fifteen or twenty minutes, and continue them for hours in succession.

Injections.—Much benefit may be derived from an occasional enema, made actively stimulating with the third preparation of lobelia; when there is much fever it will be proper to administer an injection of lobelia powder in luke-warm water, to be retained and repeated until the system becomes more or less relaxed under their influence. In some this treatment will cause a great degree of relaxation; in others the bowels may be almost insensible to the impression of the lobelia, and scarcely any visible effects be produced.

When the disease attacks the stomach, or other internal organs, the treatment will require to be prompt and vigorous, depending chiefly upon the third preparation of lobelia, or a like preparation administered in frequent and full doses. Medicine, however, will in some cases fail of having the desired effect without the aid of the vapor bath, or the application of warm bricks, wrapped in damp cloths, placed around the patient. As superabundance of

acid in the stomach will sometimes prevent or greatly retard the operation of the emetic, the use of salarratus, or bi-carbonate of soda, will then be required.

Local Remedies.—In general, stimulating and volatile liniments afford more or less relief. The parts should be wrapped in flannel or cotton, provided the pain be not increased thereby.

Intermediate Treatment.—After a paroxysm of gout, the treatment should be directed to effect a restoration of the general health, and thus to overcome the liability to another attack. This may, in many instances, be accomplished by an occasional course of medicine, together with pure stimulants, the "anti-canker medicine," and at a proper time the use of powerful tonics. The continued use of the compound lobolia pills at night, will have a good effect on the bowels. In some cases, where individuals are subject to attacks of gout, the habit of eating too freely of rich food has become so fixed with them that the stomach continues to be oppressed with more food than can be digested, and thus the patient is subjected to continued returns of gout.

In the chronic form of gout, besides an occasional course of medicine, the use of strong infusions of vegetable bitters, will often prove beneficial. Gum guiacum, spirits of turpentine, and savine, (juniperus sabina,) may also be found useful in the chronic form of the disease.

## INFLAMMATION OF THE KIDNEYS.

### SECTION XLVIII.

The kidneys may become diseased from various causes, such as exposure to cold and dampness, intemperance, blows, contusions and strains, the use of cantharides and other irritating diuretics, translated rheumatism or gout, and the formation of gravel in the kidneys. When there is constitutional weakness in the kidneys

they may become diseased and take on inflammation by almost any debilitating influence, but more especially from cold and damp feet.

Symptoms.—Arising from disorder of the general system, or from exposure to cold, constitutional derangement, such as chilliness and languor, loss of appetite, torpid bowels, flushes of heat, and fever, precede inflammatory action in the kidneys. When this takes place there is tenderness to pressure, and pain in the region of the kidneys, which is greatly aggravated by a sudden jar, from making a false step, or by suddenly bending the body forward. The pain is apt to shoot down towards the bladder and thighs. "With these symptoms are usually conjoined fever, nausea and sickness, retching and vomiting, colicky pains and constipation. The urine assumes a variety of appearances—it is high colored, ropy, depositing sediment, feetid, or bloody.

TERMINATIONS.—Inflammation of the kidneys, under proper treatment, generally terminates in a restoration of the parts to a healthy condition.

The Favorable Signs are a subsiding of the pain; a general warm perspiration; a copious discharge of urine, generally either turbid or charged with mucous; clearing of the tongue; and subsidence of the sickness and vomiting.

Where acute inflammation of the kidneys does not terminate in resolution (the restoration of its natural action) by the seventh or eighth day, *suppuration* very commonly ensues, and an *abscess* is formed.

The symptoms denoting the formation of an abscess, are shiverings and fever, occurring at irregular intervals, resembling ordinary ague or hectic fever; a pulsating pain in the kidney, a feeling of heaviness or numbness in the affected part, and great irritation of the bladder and urethra. Abscess of the kidney may "point externally, and be discharged, or it may open into the abdomen, and occasion severe and fatal peritonitis." In other instances the matter passes down the ureters into the bladder, and is discharged with the urine. In some instances an abscess will continue to discharge in this way for many months and even years.

TREATMENT.—To moderate the violence of the pain, and at the same time to aid the efforts of nature, in bringing about a favorable termination of the disease, Thomson's course of medicine, in the author's opinion, is decidedly the most beneficial.

The Course of Medicine should be given early in the attack, and repeated daily if the symptoms demand it. There will be little inconvenience in vomiting, as straining efforts will seldom increase the pain to any great degree, when the system is relaxed by the lobelia and vapor bath.

Injections.—The kidneys may be greatly influenced by medicines administered by injections. To move the bowels, they should be made stimulating, and contain a portion of lobelia. When the skin is hot and dry, the secretions of the month suspended, and the pain in the kidney severe, broken doses of lobelia should be given by the mouth, and administered by injections with the view of producing continued nausea, and the patient should take freely of pennyroyal or other simple herb teas, and an occasional dose of pepper or composition.

The Vapor Bath.—From the close sympathy existing between the skin and the kidneys, the vapor bath will prove highly beneficial, and may be administered frequently. Where the patient cannot bear the fatigue of sitting up, the steam should be applied to the patient on a couch or mattress. Not only is the vapor bath useful by exciting perspiration, but it attracts the blood to the surface, and thus lessens the undue determination to the diseased part. The same effect is produced by the emetic. The vapor bath is more especially indicated where the secretion of urine is nearly, or wholly suspended. For where the functions of the kidneys are suspended, those of the skin should be promoted, otherwise, the urea will remain in the blood and occasion serious consequences. In some instances, however, the patient requires to be kept in a state of perfect rest, and other means should be used for promotling perspiration.

EXTERNAL REMEDIES.—Besides the vapor bath, warm bricks wrapped in cloths dampened with vinegar and water, should be placed under the bed-clothes, and as near the patient as can conveniently be borne, and warm poultices applied to the small of the

back, and kept warm, either by placing a hot brick against them, or as they become cooled, they should be taken off and re-applied as hot as can be borne.

DIET.—This should at first consist of such articles as crust coffee, elm gruel, barley water, &c., and continued in until the inflammation subsides, and a favorable crisis takes place.

When an abscess forms, the general health must be sustained by a proper use of pure stimulants, "anti-canker medicine," and mild tonics, spice bitters, or a tea of poplar bark.

THE SYMPTOMS OF CALCULI, OR GRAVEL IN THE KIDNEYS, independently of inflammation, are, excruciating pain in the region of the kidneys down to the bladder; constant sickness at the stomach, with frequent retching and vomiting, pain in the inside of the thigh, retraction and pain in the testes, and stranguary.

The gravel may pass off and give perfect relief, or the paroxysms may continue, and inflammation ensue.

I visited a patient who had symptoms of gravel in the kidneys, under the care of Dr. Fonerden. The patient had taken two or three courses of medicine, and at the time I saw him, the system was very much relaxed under the influence of lobelia, and he had what are termed the alarming symptoms; and the family of the patient being unacquainted with the effects of the medicine was much alarmed. During this relaxation, the patient in voiding urine, passed a calculous or gravel stone, about three quarters of an inch in length, as thick as a common goose quill, and was immediately relieved.

Gravel in the kidneys arises from a disordered condition of the digestive organs, and is generally associated with full living, particularly in persons predisposed to gout.

When the calculi are first formed in the kidneys, they are generally of acid deposites. The urine will be high colored, and will change litmus paper to red, and deposites a sediment of red, yellow, or pink color on standing. This acid character of the urine attends childhood and persons about the age of forty.

As the constitutional energies become more enfeebled, the character of the gravel is apt to change from that of an acid to an alkaline deposite; the urine becomes pale, and deposits a white sediment or crust on standing.

TREATMENT OF GRAVEL IN THE KIDNEYS.—To relieve the pain, and facilitate the expulsion of the gravel, and at the same time to lessen the tendency to severe inflammation, a regular course of medicine will prove most effectual.

Besides the course of medicine, injections of the lobelia powder should be given occasionally with a view to relax the system, and lessen the determination of blood to the kidneys. A teaspoonful or two of the third preparation of lobelia, in a teacup half full of bayberry tea, should be given every hour or two, when the pain is severe. Whether the disease be gravel or inflammation in the kidneys, lumbago, gout, or rheumatism, the treatment here recommended will be proper in each case.

Alkalies should be used in combination with the other medicines, when the urine is acid—salaratus or the bi-carbonate of soda; the former is to be preferred. Alkalies must be occasionally used, as long as the urine indicates the existence of acid.

Acids.—When the urine is pale, and deposits a white crust, or sediment, acids should be used, as vinegar, or the pepper sauce, especially at meals. Lemon juice may be used in drinks, or a beverage may be made of other kinds of acid fruit.

Predisposition to the formation of gravel is to be overcome by restoring the general health by the use of pure stimulants, "anticanker medicine" and tonics, besides the use of alkalies or acids, as the case may require. An occasional course of medicine will be very useful to restore the general health.

Change of Air.—In deeply seated complaints, benefit is derived in many cases, from a change of residence, where medicine fails of effecting any permanently good result. A few weeks residence at the sea shore, or in a pine country, or among mountains; at the mineral springs, Schuyley's mountain, Saratoga springs, and other like places of fashionable resort, has in many instances renovated the general health, and removed the tendency to gravel, where medical treatment has failed.

## INFLAMMATION OF THE BLADDER.

### SECTION XLIX.

This is a disease of rare occurrence, except in a chronic form, the bladder not being liable, generally, to acute inflammation.

Causes.—Acute inflammation of the bladder is sometimes occasioned by repelled gonorrhea. It has also been produced by the use of cantharides, (Spanish flies,) and by the excessive use of turpentine. The disease is accompanied by a disordered state of the digestive functions. Inflammation of the bladder may also be brought on by injuries inflicted by blows, retention of urine, or by the use of forceps in labor, or by the injudicious introduction of the catheter. When the bladder is predisposed to disease, exposure of the feet to cold and dampness may occasion inflammation—still the disease is of rare occurrence.

The Symptoms are—an almost constant desire to pass urine; burning pains in the region of the bladder, which frequently shoot through the testes, and down the thighs; and extreme tenderness in the region of the bladder. The patient is seldom able to pass much urine, and that which is voided is of a deep red color, and frequently tinged with blood. There is much distress at the stomach, with sickness and vomiting. The bowels are costive, and if the inflammation extend to the rectum there will generally be more or less dysenteric symptoms.

More or less reaction attends acute inflammation of the bladder. The skin is dry and hot, the pulse quick, the tongue coated and dry, with excessive thirst; the patient is extremely restless, and the countenance is expressive of great anxiety. When the neck of the bladder is inflamed, there will be retention of urine, and any attempts to introduce the catheter or bougie causes extreme suffering.

TERMINATIONS.—Inflammation of the bladder terminates either SIG. EE.

in resolution, suppuration, gangrene, or a thickening of the coats of the bladder.

FAVORABLE SIGNS.—When the inflammation is about to terminate in *resolution*, which signifies a restoration of the parts to their natural condition, there will be general perspiration with an uniformly warm skin; subsidence of the pain; the parts less tender to pressure; and a free discharge of urine, with but little pain.

Suppuration.—Inflammation of the bladder very rarely terminates by suppuration. When this does occur, the pain and fever are lessened; the patient experiences chills or rigors, and a white matter is discharged with the urine.

Gangrene occurs much more frequently than suppuration. When gangrene is about to take place, the pain and fever suddenly cease; there is great prostration of strength, "cold extremities, profuse and clammy perspiration," pulse weak and frequent, hiccough, confusion of mind, and a death-like expression of countenance.

Sudden and severe attacks of acute inflammation of the bladder usually run their course to a favorable or fatal termination, by the seventh or ninth day. In some instances the disease becomes seated, or as it is expressed in medical language, the inflammation assumes the *chronic* form.

TREATMENT.—Severe attacks of inflammation of the bladder, require energetic treatment in the early period, and a persevering course to be continued until the disease abate, or the case prove hopeless of cure. As in all severe attacks of disease, repeated courses of medicine must be chiefly relied upon, or the system kept under the influence of lobelia, which will aid in equalizing the nervous influence, and will promote perspiration.

INJECTIONS to the bowels must be used freely in order not only to remove their contents, but also to influence the action of the bladder. The lobelia powder administered by injection, and retained, will tend to relax the neck of the bladder, and favor the escape of urinc; and besides this, it fulfils other important indications, equalizing nervous influence, and promoting the various secretions. Occasionally lobelia administered in this way will

produce sickness and vomiting, and greatly relieve the pain in the bladder.

The Vapor Bath is useful in inflammation of any internal organ or tissue. It attracts the blood to the surface, and powerfully assists to equalize its circulation; it relieves pain, aids the efforts of nature to overcome obstructions, and renders the system more susceptible to the impressions of medicine. The bath is to be repeated as the circumstances of the case may require, and if the patient find relief by the bath, it may be administered very frequently. If, however, the patient be more easy when kept quietly in bed, with warm poultices applied to the parts, the bath may be disused for the time. Most physicians of the old school use the vapor bath in this disease.

Poultices composed of Indian mush and flaxseed, stewed an hour or more, then adding ginger and green lobelia, or composition powder must be constantly applied to the abdomen. A poultice prepared by stewing wormwood and tansy in vinegar, and thickened with Indian meal or slippery elm, may be used.

DIET.—During the active stage of the disease, the stomach will not digest any food except it be of the most bland and mild character, elm gruel, flaxseed tea, adding a small portion of loaf sugar, barley water, and crust coffee.

If the tongue be thickly coated, the patient should take occasionally a strong decoction made of sumac leaves and berries adding a portion of cayenne, or of the third preparation of lobelia. This preparation is also well adapted to those cases where suppuration occurs in the bladder, or the inflammation assumes the chronic form.

CHRONIC INFLAMMATION OF THE MUCOUS MEMBRANE OF THE BLADDER is a common form of disease.

Symptoms.—"Slight lancinating pains, attended with a sense of burning in the region of the bladder, and a feeling of weight and tenderness in the perinæum; frequent and harassing desire to pass urine, with occasional spasmodic action of the bladder and urethra. The urine is loaded more or less with a tenacious mucous. Slow fever generally attends, accompanied with thirst, general debility, particularly about the back and loins; and in

protracted cases, much emaciation and exhaustion supervene. There is generally considerable derangement of the digestive functions, loss of appetite, sometimes nasuea and vomiting, costiveness, tongue covered with white or brown fur, and the skin is harsh and dry."

Chronic inflammation of the bladder is often associated with gout, and scrofula. It prevails most in the aged and infirm, and more especially in the *intemperate*.

TREATMENT.—Chronic inflammation of the bladder is to be cured by a course of treatment best adapted to restore the general health, together with stimulating injections to the bowels, composed of a strong decoction of sumac leaves or berries, adding a portion of cayenne and lobelia; and a free use of an infusion or tea, of either pipsissewa, sumac bark, leaves, or berries; uva ursi or bear berry, or buchu. An infusion of peach tree leaves is highly spoken of by some practitioners. Balsam copaiva has been used with much benefit in this disease.

An occasional Course of Medicine, and the patient kept in a perspiration for several hours after, will in general prove the most effectual method for the cure of chronic as well as acute inflammation of the bladder.

When the patient is infirm and far advanced in life, it will generally be useless to attempt to affect a cure; more especially if the disease be of long standing. The treatment in such cases should be of a palliative character.

The same symptoms that accompany chronic inflammation of the bladder attend, also, disease of the prostrate gland, stone in the bladder, stricture of the urethra, and ulceration of the neck of the bladder. The constitutional treatment, however, will require to be the same in each case under similar conditions of the general health. Thus, if the stomach be disordered, an emetic will be proper whether the patient is affected with stone, or with simple inflammation of the bladder. If there be retention of urine from spasm of the neck of the bladder, or from stricture of the urethra, the vapor or warm bath, and injections to the bowels, to relax the parts, will be equally applicable in either case.

A German applied to me affected with retention of urine, and

the introduction of a catheter twice a day had been required for the three preceding weeks. A full course of medicine was given and he did not need the use of the catheter after. Even where retention of urine is occasioned by stone in the bladder, a full course of medicine may overcome the difficulty in many instances, although permanent relief is not reasonably to be expected by it. Where there is a stone in the bladder that is very hard, it can be removed only by an operation.

# DIABETES-EXCESSIVE FLOW OF URINE.

### SECTION L.

The more prominent Symptoms of this form of disease, are: a profuse discharge of urine; excessive thirst; voracious appetite; clean tongue; dry skin; and wasting of the flesh.

Character of the Urine.—Various derangements in the system may exist, accompanied by an increased flow of urine, but essentially different from diabetes. Diabetic urine contains sugar, giving it a sweet taste and smell; "and if dropped and partly dried upon linen or paper, it is glutinous and adheres to the fingers." The amount of urine discharged varies in different cases, but it is always very great; and, in some instances, seven or eight quarts have been discharged in the course of twenty-four hours, and this continued for several weeks in succession.

Causes.—A depraved state of the digestive functions, and an exhausted state of the vital powers, are the essential causes of this complaint.

The disease prevails commonly in old age, and in constitutions broken down by intemperance or debauchery. It sometimes prevails in children after protracted cholera infantum.

The disease difficult of cure.—Occurring as a consequence of a worn-out or broken-down state of the system, genuine diabetes

is very rarely cured. Recoveries from it, however, do happen under a judicious and persevering course of treatment.

Where the disease is not overcome, the strength and flesh continue to waste, hectic fever occurs, and frequently consumption of the lungs, dropsy, or appoplexy supervenes.

Instances have occurred in which several members of the same family died of diabetes, thus showing, as it would seem, an hereditary tendency to the disease.

The disease, in some instances, terminates its course in a few weeks, whilst in others it will continue for many months, or even years.

TREATMENT.—The important indications are to restore the digestive and nutritive functions. To accomplish this, the chief dependence must be upon courses of medicine in the early stage of the disease. There are no means so effectual in revolutionizing the system, and in restoring the important vital functions, from a diseased, to a more healthy condition, as the regular courses of medicine. Yet in diabetes, unless administered in the very onset of the disease, and under favorable circumstances in relation to the constitutional vigor of the system, even these will be found unavailing. If the constitution be broken down, or the patient advanced in life, it would not be advisable to subject him to any unpleasant operation by medical treatment, for under these circumstances there cannot be a reasonable hope entertained of effecting a cure. It must be borne in mind, however, that the system is liable to disorders attended with a profuse discharge of urine, differing essentially from diabetes. True diabetes is comparatively a rare complaint; whereas an excessive flow of urine is of frequent occurrence.

Repeating the Course of Medicine.—In the early stage of the disease the course of medicine may be frequently repeated, provided the patient should experience benefit by the operation. When the condition of the stomach does not require the emetic, the bath may be applied daily, with a view to relax the skin, and cause a determination to the surface. The vapor bath may also have an influence in changing in some degree, at least for a time, the thickened state of the blood, which in diabetes is observed to

be thick like molasses, probably owing to a loss of its natural temperature, and a weakened state of circulation. The caloric and electricity imparted by the vapor bath, exert a most decided influence in vitalizing the blood, by facilitating its circulation through the lungs, and by restoring its natural temperature. When the patient is too feeble to bear sitting up, the vapor bath may be applied in bed, and in this way a moderate perspiration continued by it for an hour or two. When the skin is very dry and harsh, it may be difficult to excite perspiration, and the patient will consequently be more or less oppressed with heat, and require frequent sponging over the face and body with tepid water, or vinegar and water until perspiration be brought on. Capsicum tea or other stimulants should be given, together with nauseating doses of the tineture of lobelia.

The sumac leaves and berries made into a strong decoction, adding a small portion of cayenne, will be proper to be oecasionally given; and during the first period of the disease, frequent doses of the tincture of lobelia, or the compound lobelia pills, should be administered.

Toxics will be proper, more especially where the symptoms assume a more favorable aspect. The thoroughwort or bonesett may be used as a tonic in any period of the disease, and where this treatment requires to be long continued, an occasional change or alteration of the tonics may be appropriate.

The No. 3 pills may be used as a substitute for the sumae tea, if the patient prefer this convenient form.

Stimulating liniments, pepper sauce, or No. 6, should be applied to the surface of the body and limbs, after a vapor bath, and friction to the skin daily persevered in.

DET.—The food must consist of the most nourishing kind that the stomach will bear. Eggs, beef, mutton, milk, &e., answer well in many cases. Meat, in the early period of the disease, however, and more especially if there be fever, will be improper.

VEGETABLES, in most instances, disagree with the stomach, and in some eases, even a small piece of bread will do injury.

Animal Food is recommended in diabetes. In some instances,

however, it will not suit the stomach—when custards, arrow root, eggs, milk porridge, rice and milk, &c., may be substituted.

From the feeble state of the digestive powers, and the voraciousness of the appetite, there is an extreme liability to eat more than is proper.

The clothing should be very warm, and especial attention is necessary to keep the feet dry and warm.

Exercise in the open air is beneficial where the patient is able to get out, either to walk or to ride.

DIABETES, however, is very seldom cured, when it occurs in depraved, or otherwise broken down constitutions: these commonly form an insuperable barrier to the success of the practitioner, though a ray of hope may be still held out, as in the most desperate cases cures are sometimes effected.

# RETENTION OF URINE.

### SECTION LI.

The urine may be retained in the bladder either from inflammation or constriction in the neck of the bladder; mechanical obstructions in the neck of the bladder or urethra; or from a loss of the power to contract the bladder, and expel its contents.

Ist. Inflammation in the Neck of the Bladder is one of the most common causes of obstruction to the passage of urine. The inflammation may arise from a diversity of causes, such as the application of fly blisters to any part of the body or limbs; the internal use of turpentine, or cantharides; disease of the prostrate gland, or of other parts in close sympathy with the bladder; exposure to cold and dampness; an acrid state of the urine; repelled gonorrhea; and constitutional disorder, more especially in gouty patients.

2d. MECHANICAL OBSTRUCTIONS.—These are gravel in the neck

of the bladder, or urethra; stricture of the urethra, enlargement of the middle lobe of the prostrate gland, prolapsus uteri, and pressure of the uterus upon the neck of the bladder during pregnancy.

3d. Paralysis, or a loss of power to contract the bladder, occurs from injury of the brain and spinal marrow; palsy of the lower half of the body; malignant disease, as typhus fever; blows or falls upon the back, over-distention of the bladder from retention of urine caused by mechanical or other obstructions; injuries sustained during child-birth, from exhaustion of nervous power, from bad habits or from old age.

TREATMENT.—Whether the retention of urine be occasioned by inflammation, or spasm in the neck of the bladder, or urethra, or from mechanical obstruction, the constitutional treatment proper in the one case, will be equally applicable in the other. Mechanical obstructions, however, in many instances, require other means besides constitutional treatment.

In ordinary cases, retention of urine may be relieved by evacuating the bowels by injections containing a portion of lobelia, together with the use of means for equalizing the circulation, and producing perspiration, by hot stimulating teas, and the vapor or warm bath, or a blanket wrung out of hot water, folded several times, and laid over the abdomen, or by applying a bag of hops, wet with hot vinegar.

Injections.—One of the most effectual remedies for stoppage of urine, is the use of injections of lobelia powder, in luke-warm water, and caused to be retained in the bowels. This, together with the application of warmth to the surface, as above mentioned, will seldom fail of removing the difficulty, unless the retention should arise from gravel in the urethra, or neck of the bladder, or from other mechanical obstructions. Even when there is a mechanical obstruction, the above means should be used, with a view to relax the parts, which will not only afford relief, but render the removal of the mechanical obstructions less difficult.

THE VAPOR BATH fulfils several important indications in the stoppage of urine. It seldom fails of affording more or less relief from pain, and, in some instances, will be sufficient, when well

applied, to remove the obstruction, more especially when it is occasioned by inflammation, or spasmodic contraction in the neck of the bladder, brought on by exposure to cold and wet. Medical men most generally resort to tobacco injections, in severe cases, for the purpose of producing relaxation. This, however, sometimes produces serious consequences, from the poison of the tobacco being absorbed into the blood. The lobelia will answer every good purpose that could be desired from the tobacco, and without any risk to the patient of bad consequences from its employment, even in large quantities. In aggravated cases it may be found necessary to use powerfully stimulating injections to the bowels, with a view to prevent stagnation of the blood, in the diseased parts. For this purpose, the liquid of the third preparation of lobelia will be proper, and may be used in larger or smaller quantities, as the case requires.

EMETICS.—In some instances retention of urine is associated with extensive derangement of the stomach, so that emetics may be found not only advantageous, but necessary; and when the obstruction is not overcome by the means above stated, it will be proper to give an active emetic of the third preparation of lobelia, or some like preparation, such as the brown lobelia, given in bayberry tea, adding a teaspoonful of capsicum to each dose. The vapor bath previous to the emetic, will render the latter more effectual.

Retention of urine is always more or less dangerous when continued over twenty-four hours without any urine passing. It is therefore highly important to persevere in the treatment until the obstruction be partially or wholly removed. Thus in some cases it may be found necessary to keep the patient fully relaxed, for many hours together, under the influence of the lobelia injections, and also to repeat the emetics every two or three hours, together with the frequent application of the vapor or warm bath, or a constant moist heat kept around the patient. The drink should consist chiefly of elm gruel, flaxseed tea, watermelon-seed tea, barley water, &c.

Introduction of the Catheter.—When the catheter can be introduced it gives instant relief, but when the urethra or neck of

the bladder is highly inflamed, it will be worse than useless to attempt to pass a catheter. When the system is fully relaxed, the catheter may, in some instances, be introduced by one acquainted with the proper manner of using it. Much harm, however, often arises by repeated attempts to pass the catheter when there is much inflammation. It is in paralysis of the bladder that the use of the catheter sometimes becomes indispensable. But in those cases attended with a burning pain in the neck of the bladder, with tenderness to pressure, and a continued and painful desire to pass urine, the catheter cannot be introduced safely even by the most skillful surgeon, and every attempt made to introduce it, only tends to increase the difficulty.

TAPPING THE BLADDER.—When gravel is lodged in the neck of the bladder, or in the urethra, and in cases of stricture, every effort to overcome the obstruction may sometimes prove abortive. Under these circumstances, the last and only resource is in tapping the bladder, as the only means of saving the patient's life. This operation, of course, will demand a surgeon, and one who is fully acquainted with the anatomy of the parts.

In retention of urine from falling of the womb, or from its retroversion, the introduction of a bougie may be sometimes

necessary.

TREATMENT OF RETENTION OF URINE FROM PARALYSIS OF THE BLADDER.—The chief dependence here must be in the use of the catheter, stimulating injections to the bowels, together with the employment of such remedies as tend to give tone to the bladder, either by general constitutional treatment, when the circumstances of the case require it, or by the use of stimulating diuretics, such as the oil of juniper, balsam of fir, or Peruvian balsam.

In low forms of fever, the bladder, in some instances, looses the power to contract and expel the urine, and becomes greatly distended, which, if not relieved, may occasion scrious consequences. This should be borne in mind by those who have the charge of patients very ill of typhus, or other malignant forms of fever; and when there is evidence of a great accumulation of urine, as will be manifested by a hard tumor in the right side of the belly, means

should be used for evacuating it; and when hot fomentations to the abdomen, and stimulating injections to the bowels fail of producing a discharge of urine, it should be drawn off by the introduction of a catheter; or at least an attempt should be made to accomplish it.

In severe injuries of the back, paralysis of the bladder frequently occurs, and requires the repeated use of the catheter until the power of contraction is restored to the bladder.

When it depends upon the debility consequent upon old age, then fresh air, vapor baths, friction to the surface, stimulating diuretics, and if the patient can bear it, occasionally a shower bath in the morning must be employed. The urine should be drawn off before the bladder becomes greatly distended, for if this be permitted to occur, it tends still further to weaken the bladder. In some instances to prevent distention of the bladder, the use of a catheter will be required three or four times in the course of twenty-four hours, in order to afford an opportunity to the bladder to regain power to contract and expel its contents.

Onions mashed fine, and applied to the perineum, are said to have had a good effect in many instances, in restoring the tone of the bladder.

### STRANGUARY.

### SECTION LII.

(DIFFICULTY AND PAIN IN VOIDING URINE.)

When the urine is voided with great difficulty, and in small quantities, attended with severe burning pain, and a continued desire to urinate, it is called *stranguary*. The difference, therefore, between stranguary and retention of urine is, that in the former, the urine passes, though it may be mere drops, and attended with a painful desire to void it; whereas, in the latter, there is a complete obstruction to the passage of urine.

Causes.—Stranguary is in almost every instance associated with constitutional disease. It is liable to occur at any period of life, sometimes attending the period of teething in children, and it is very common in old age. The application of a fly blister to any part of the body, will occasion stranguary in some, and the same effects are sometimes produced by the internal use of turpentine.

Gout, gravel, and piles, are often attended with difficulty and pain in voiding urine. The intemperate use of spirituous liquors, venerial excesses, exposure to cold and dampness, or whatever else tends to derange the general health, may occasion stranguary in persons predisposed to it. "Nervous and hysterical females are liable to extremely violent pains in the neck of the bladder and urethra, and which are generally most intensely felt immediately after discharging urine." Stranguary in the old and feeble, is sometimes occasioned by an enlargement of the prostrate gland, but more commonly it arises from other causes, as disease of the coats of the bladder, irritating acids in the urine, and gravel.

TREATMENT.—Infants may be relieved of stranguary by the warm hip bath or fomentations to the belly, together with the use of injections to the bowels, composed of half a teaspoonful of the tincture of lobelia, or the same quantity of green lobelia in composition tea. If the general health be much deranged, an emetic may be employed, followed by the use of flaxseed, or watermelon seed tea, and occasionally by small doses of the tincture of lobelia.

When stranguary is occasioned by a blister, this of course should be removed, and the patient take mucilaginous drinks, as elm, flaxseed tea, &c. If this does not remove the difficulty, recourse should be had to fomentations and injections. When it arises from the use of turpentine, the same constitutional treatment above recommended will be proper.

Associated with gout the chief dependance must be on constitutional treatment, with a view to correct the acrid state of the urine, and to restore the general health. As a means of affording relief during severe attacks, the warm bath, vapor bath, or hot fomentations should be used, together with injections containing a portion of lobelia.

When it arises from gravel constitutional treatment will be also

proper, for which an occasional course of medicine will prove the most effectual. When the urine is high colored, and deposits a reddish or yellow sediment on standing, alkalies should be used, such as salaratus, bi-carbonate of sodo, or a tea of hickory ashes.

When stranguary is occasioned by irritation from piles, a strong decoction made by steeping witch hazle or sumac leaves in boiling water, should be administered by injection, and retained in the bowels for several hours, which will lessen irritation in the piles, and in this way the occurrence of stranguary may be prevented. The lobelia injections and hot fomentations may be found necessary to relieve the immediate symptoms of painful irritation.

When accompanied with hysterical symptoms, an emetic or a full course of medicine will be necessary. The same constitutional treatment that will cure hysteria, will also remove stranguary. When the stranguary arises from prolapsus, or other displacement of the womb, the same constitutional treatment will be proper, more especially the enemas containing lobelia; the vapor bath, and hot fomentations. It sometimes happens, however, in displacement of the uterus, and more especially in its retroversion, that the introduction of a gum elastic bougie into the bladder to draw off the urine, becomes necessary before the displacement of the uterus can be overcome.

Females affected with fluor albus, or whites, are subject to severe burning pain on voiding urine, in consequence of an extremely irritable state of the urethra. Injections of a strong decoction, prepared by steeping witch hazle or sumac leaves in boiling water, adding a small portion of capsicum, should be used two or three times a day, with a female syringe, beside resorting to the usual means for restoring the general health, by which the parts will become strengthened.

When attendant upon old age, or occurring in constitutions exhausted by debauchery and intemperance, a permanent cure of stranguary is not to be anticipated; a relief of the symptoms will be all that can in general be effected by any course of treatment whatever.

# INCONTINENCE OF URINE.

#### SECTION LIII.

(INVOLUNTARY FLOW OF URINE.)

INCONTINENCE OF URINE, though not in general attended with pain, is nevertheless, in many instances, a very troublesome complaint. It prevails most during childhood, and in old age.

Inability to retain the urine, with children, is commonly owing to constitutional weakness in the urinary organs. Sometimes it arises from an acrid state of the urine, and occasionally it is caused by gravel. Weakness of the urinary organs may be induced frequently by having wet and cold feet.

The aged and feeble are especially liable to incontinence of urine, from weakness or paralysis of the spinchter muscle of the bladder, by which the urine is retained at the command of the will. In some instances the action of this muscle is completely lost, and the urine is continually passing off by drops as fast as it enters the bladder from the kidneys. This complaint is frequently associated with palsy and gout. Involuntary discharges of urine often take place in protracted fevers, where patients are extremely low, and observation proves it to be an unfavorable symptom. In fine, the same causes that produce retention of urine in one, may occasion stranguary in another, and in another an inability to retain the urine. Thus gravel, or stone in the bladder, which frequently occasions a stoppage of urine, in other instances will cause the urine to pass off involuntarily.

TREATMENT.—Incontinence of urine in children, is in most instances removed by the natural increase of constitutional strength. When the general health is impaired, constitutional treatment will be required, such as an emetic to cleanse the stomach, and if the stools exhibit an unhealthy appearance, injections may be used to advantage, not only in correcting the bowels, but also to add

strength to the urinary organs. The injections are to be prepared in the ordinary form. A strong tea made of the sumac bark, leaves or berries, or of the aspen poplar bark, will be benificial in strengthening the urinary organs, either in the young or old. For an adult, a teacup two-thirds full, and for a child, a wineglass full of the tea may be taken two or three times a day. If the urine be highly colored, and deposits a sediment on standing, alkalies must be used, such as bi-carbonate of soda, salæratus, a tea of hickory ashes or lime water.

A cold shower bath in the morning, friction to the surface with a salted towel, nourishing diet, exercise in the open air, and whatever else tends to invigorate the system, will also strengthen the urinary organs.

Children often evacuate the urine involuntarily at night during sleep; and in some instances this habit continues even to adult age. Voluntary discharge of urine frequently takes place under the influence of a dream. "Incontinence of urine," says Mr. Charles Bell, "never takes place but when the boy is asleep upon his back; and the cure is a very simple one. He is to accustom himself to sleep upon his face or side; the urine is not passed, nor is he excited to dream of making urine, while he keeps this posture. The circumstance is unaccountable, until we reflect upon this master-spring of the neck of the bladder—the sensible spot, a little behind and below the orifice of the bladder. When a person lies upon his belly, the urine gravitates towards the fundes; but when he lies upon his back, it presses upon this sensible spot, and distends that part of the bladder which is towards the rectum."

Long continued inability to retain the urine, more especially when associated with old age, is in general an incurable complaint.

# SUPPRESSION OF URINE.

#### SECTION LIV.

(THE KIDNEYS CEASING TO FORM URINE.)

Suppression is to be distinguished from retention of urine, as in the former the kidneys cease to select the urine from the blood, consequently none is formed; whereas in retention the urine is formed, but the passage by which it escapes from the bladder is obstructed. The chief danger attending retention of urine is over distention of the bladder; but when the urine is not formed in consequence of a loss of action in the kidneys, the suppression is of serious consequence if long continued.

The loss of action in the kidneys is a consequence of great derangement in the system, and seldom occurs except in the last stage of disease, when the living powers are fast sinking and the patient beyond the reach of recovery. Suppression of urine, however, does occasionally take place under circumstances different from those above mentioned; that is, it sometimes occurs when the living powers are not so far exhausted but that the patient may recover under energetic treatment.

SYMPTOMS.—The suppression may be either partial or complete, and the only certain method of determining the suppression is by introducing a catheter into the bladder.

Suppression of urine cannot continue long without producing serious consequences. "There is fever, thirst, a taste similar to that of urine in the mouth, and a smell of urine in the perspiration; to these nausea, vomiting, sometimes of fluids, having an urinous odor, and hiccup succeed; and to these oppressed breathing, delirium, and eventually stupor and convulsions.

TREATMENT.—Suppression of urine calls for prompt and energetic treatment, with a view to excite action in the kidneys. When the suppression takes place with a group of other symptoms,

denoting a fatal termination, as in the last stage of a disease, all remedial measures must of necessity prove useless. When there is a probability of a recovery being effected, stimulating injections should be administered to the bowels, and a tablespoonful of the third preparation of lobelia may be used in each injection, and repeated frequently.

Steaming is of the greatest importance, not only to throw the urea out of the blood by perspiration, but it sustains and augments its vitality by the heat and electricity imparted to it, and by quickening its circulation through the lungs.

EMETICS will also aid in restoring action to the kidneys.

Hot stimulating poultices must be applied to the urinary region, or small of the back, and kept warm.

The patient should be kept in a perspiration,—this is very important.

The treatment above directed will be applicable not only to the suppression of urine, but also to the removal of the constitutional disorder which may have caused the loss of action in the kidneys. It must not be interred that I would recommend a thorough course of treatment in those cases where the patient is evidently in the last stage of disease, and past the hope of recovery.

Case.—I attended a gentleman near Germantown, who had been confined to his room nearly the whole of the winter, and he having, as he supposed, suppression of urine, desired me to attend him. No urine had passed during seventy-four hours, and this was unaccompanied by any distention in the region of the bladder. He complained of pain and heaviness in the head, showing that the disease was assuming a serious aspect. A thorough course of medicine was administered, and stimulating injections repeated frequently, together with the free use of stimulating medicine. Not long after this treatment had been commenced, the kidneys resumed their functions, and the patient recovered rapidly; the means used for restoring action in the kidneys, had the effect also of removing the original disease, which had occasioned the suppression.

# DISEASE OF THE LIVER.

#### SECTION LV.

(ACUTE INFLAMMATION OF THE LIVER.)

Acute inflammation of the liver does not occur frequently in temperate climates.

Causes.—Inflammation of the liver may be induced by blows or other injuries in the region of the liver; a sudden check to perspiration after violent fatiguing exercise; by gall stones, which are hardened concretions formed in the gall bladder, and found in the ducts; or it may be occasioned by the same influence that produces intermitting or remitting fever.

The Symptoms attending acute inflammation of the liver are exceedingly diversified. Generally there is deep seated pain in the right side about the false ribs; which is considerably aggravated by pressure. There is usually pain in the shoulder, and in some instances the pain is confined exclusively to that part. A deranged condition of the stomach and bowels always accompanies this disease, attended with more or less nausea and vomiting. The stools are generally light colored; and the urine yellow, or red.

Professor Mitchell mentions the case of a boy whose liver was wounded by the discharge of a gun, in which no pain was experienced except in the shoulder. In another instance, a negro who was run through the liver with a sword cane, complained of pain in the *shoulder*, and insisted strongly that the *wound* was there. Pain in *shoulder* is not, however, a constant attendant of inflammation of the liver. Neither does costiveness always prevail, for sometimes there are acrid secretions from the *liver*, which cause purging.

The skin is generally hot and dry, and has a very sallow appearance. The patient can lie with ease on the affected side.

As the disease advances, the nervous system becomes affected; there is great anxiety, and sometimes delirium.

The duration of acute inflammation of the liver varies from four or five to ten or twelve days, when it terminates either in a restoration of the natural action of the organ, or in the formation of an abscess; or it may become a chronic disease.

There is always more or less danger attending acute inflammation of the liver. Much, however, will depend upon the promptness of treatment in the early stages of the disease.

Inflammation of the liver is frequently complicated with pleurisy, and inflammation of the lungs. The stomach and bowels are always disordered, and probably, in the majority of instances, the *stomach* is diseased antecedent to the *liver*.

TREATMENT.—Acute inflammation of the liver requires the same general course of treatment as pleurisy, or inflammation of the lungs. A full course of medicine must be given early in the disease, and repeated daily, if the symptoms be violent, until a crisis be effected. If the patient cannot sit up, a moist heat may be applied to the feet and around the body, in place of the vapor bath. The system should be relaxed by broken doses of lobelia. Injections are especially indicated, not only to relieve the bowels, but to equalize the circulation, and also to effect a relaxation of the system by lobelia administered in this way.

Continued retching, and vomiting, by operating as a sort of exercise to the liver, has a beneficial influence upon it, enabling it to replace the loss of morbid secretions by more healthy ones.

STIMULANTS must be given with a view to equalize the circulation; to maintain a determination to the surface; and to excite the secretions of the mucous membrane of the stomach and bowels. More especially should pure stimulants be freely used in the advanced stage of the disease. Capsicum tea is the best stimulant; and if the skin be dry, portions of lobelia powder or tincture must be added.

LOCAL APPLICATIONS.—A warm poultice must be applied to the affected side, and a hot brick, or a bottle of hot water placed so as to keep the poultice warm.

The Diet must be light, consisting chiefly of gruel, barley

water, crust coffee, &c. In the more advanced period of the disease, when the strength is greatly exhausted, it will be necessary to give wine whey and essence of beef.

BITTERS may be used to restore digestion, after the tongue begins to clean, or the disease has formed a crisis.

The Symptoms denoting the formation of an Abscess in the Liver, are—irregular chills or rigors; pain and sense of fullness in the region of the liver; and night sweats. When this group of symptoms is manifested after acute inflammation of the liver, of several days continuance, it furnishes strong evidence that suppuration has taken place. The abscess may point to the surface and be discharged externally; or the pus may be discharged through the gall ducts into the bowels; or it may escape into the cavity of the abdomen, and occasion fatal peritonitis. Abscesses of the liver have in some instances penetrated the lungs and their contents discharged by coughing.

An abscess having formed, the indications for the treatment are—to support the strength of the patient by the use of pure stimulants and bitters, and by a nourishing diet. The articles of diet, however, must be such as are suited to the condition of the enfeebled digestive powers.

2. Chronic Disease of the Liver.—Although acute inflammation of the liver is of rare occurrence, yet no organ in the body, with the exception of the stomach, is more liable to chronic derangement of its functions, than the liver. A disordered stomach is in almost every instance the cause of disease in the liver. A deranged liver is almost always a torpid one. Dyspepsia is mostly attended with a deficiency in the secretions of bile, from a want of proper circulation of blood through the liver. Costiveness is in general the consequence of a want of bile, and the use of purgative medicines with a view to overcome a costive habit is worse than useless, as they aggravate and weaken the bowels, without restoring the action of the liver. The intemperate use of alcoholic drinks is very apt to produce finally, torpor of the liver, and in some instances this organ becomes greatly enlarged, as a consequence of intemperate habits.

A disordered stomach lessens the nervous power which governs

the function of the liver, and consequently the circulation of the blood through the liver is enfeebled, and the secretion of bile diminished; and if the cause that occasions the disorder in the liver be continued, as in habitual drunkenness, the liver may lose its power to perform its functions, at least for a time, even though the habits of the person may have become reformed. The continued use of active cathartics, more especially of mercurial preparations, are pernicious, not only to the liver, but to the stomach and bowels. Close and intense study, confinement in illy-ventilated apartments, and exposure to cold and dampness, depressing passions, and excessive losses of blood, frequently occasion torpor of the liver. Derangement of the functions of the liver, however, are in most instances, but one link in a chain of disordered functions, from loss of vital power in the system.

Thus torpor of the liver is associated with acute disease, such as dysentery, cholera morbus, pleurisy, erysipelas, and autumnal fevers. When patients are bled largely during an acute disease, the excessive loss of blood may occasion torpor of the liver, continuing for years, accompanied with dyspeptic symptoms.

If the debilitating influence occasioning torpor of the liver be continued, the circulation will become more obstructed and feeble, and finally the organ may lose its power to secrete bile, occasioning inveterate dyspepsia, dropsy of the abdomen, or jaundice. Hence disease of the liver which at first is but a link in a chain of disordered functions, and which may be readily cured by correcting the disorder of the stomach, may finally be the cause of a new train of disordered action throughout the system, requiring a long course of treatment to effect a cure.

Symptoms attending chronic affections of the liver are extremely diversified. The most obvious symptoms indicating obstruction to the flow of bile, is a yellowness of the skin and whites of the eyes. The liver, however, may have its functions greatly disordered, without there being any appearance of sallowness of the skin. Sometimes there may be a low grade of inflammation in the liver, occasioning shooting pain in the side and shoulder, accompanied with a dry, harsh, contracted state of the skin; loss of appetite, bad taste in the mouth, extreme restlessness at night, and dizzi-

ness of the head. In such cases digestion is always impaired; there is flatulency and distress after meals, attended with heart-burn, and constipation of the bowels. In some cases the patient will be affected with occasional diarrhea, the stools presenting various appearances, sometimes clay-colored; in other instances bilious; or they may be slimy and hard, or have a green appearance. Sometimes the liver becomes enormously distended and hard, filling at least half the cavity of the abdomen, and its margins are distinctly felt by pressing the hand on the abdomen.

TREATMENT.—Depending for most part upon a disordered stomach, the indications for the cure of the disease of the liver are, to correct the disordered condition of the stomach and bowels, and to warm and invigorate the system by the use of stimulants and tonics, and by a well regulated diet.

Torpor of the liver may be more readily overcome in most instances by a course of medicine, than by any other means. If the disease becomes seated, it will be necessary in most cases to repeat the course of medicine, and during the intervals between them, to use bitters freely; and if the bowels be costive, take three or four of the compound lobelia pills after each meal and also at bed time.

Acros.—Especial relief may sometimes be obtained by the use of *pepper sauce*, taken in moderate doses three or four times a day, and more especially at meals.

The Vapor Bath, by its influence in restoring the functions of the skin, may be employed with benefit in disease of the liver or of any other internal organ. Thomsonians, therefore, in applying remedies, do not require a particular investigation to ascertain the precise location of the disease, nor to know what name nosologists would very learnedly apply to it; for the same general treatment will be applicable to every other form of disease. Thus the vapor bath which proves beneficial in curing disease of the liver, will be equally applicable to disease of the kidneys, bladder, lungs, pleura, bowels and head, and in fine, it may be administered in almost any disease with safety, though it does not always prove beneficial.

EMETICS.—The most efficient means to remove obstructions of

the liver, in general, are the application of the vapor bath, followed by a prompt emetic. Cases of very stubborn character have been cured by continued vomiting from sea-sickness, the patient being in a relaxed condition, similar to that produced by the influence of lobelia upon the system. In cases of long standing, however, and when the disease is associated with old age or an exhausted constitution, the frequent repetition of a course of medicine might be harrassing to the patient, and tail to effect a cure. A change of organization in the liver having taken place, as it sometimes happens when the disease has been long continued, a palliation of the symptoms, by stimulants and tonics, is all that would be advisable by way of medicine,—as a radical cure, under such circumstances, is rarely to be accomplished.

The functions of the liver may be influenced to a greater or less degree by means of medicine operating upon the bowels. Hence injections will be useful, not only to relieve the bowels, but when properly prepared and administered, to exert a beneficial influence on the liver. Lobelia administered in this way, and retained, diffuses its influence throughout the whole system, and at the same time that it occasions relaxation of the organs, it tends to restore their proper functions. Again, injections are useful to cleanse the bowels from morbid secretions, by which they are more or less coated, in nearly, if not in all cases of seated disease, with but little regard to name or location. The morbid secretions alluded to, usually pass off in the form of flakes, and sometimes in pieces, from a few inches to a foot, or even a yard in length, having somewhat the appearance of an intestine. Patients not aware of the frequency of its occurrence, sometimes become alarmed at the passage of this kind of substance from the bowels. There are, however, few, if any recoveries from seated disease, in which there has not been more or less of this morbid secretion passed from the bowels.

FOOT BATH.—The following mode of preparing and using a foot bath, is recommended by many practitioners who have tried it, namely:

"Into a glass vessel, capable of holding a pint or more of fluid, put eight ounces of water, and then pour in four ounces of nitric,

and the same quantity of muriatic acid. One ounce of this mixture to a gallon of water will form a bath of medium strength. The feet and legs of the patient are to be immersed in this bath at the the temperature of about 96 deg., and kept there twenty minutes or half an hour, just before going to bed. This should be done every night, and the same bath will remain good for five or six nights." The utility of the warm foot bath cannot be doubted, and as there can no harm arise from the use of the acids, they should be added as above directed.

If the tongue be coated with fever, a strong decoction of the bayberry or sumac, with the addition of a teaspoonful of composition powder, or half the quantity of capsicum, may be taken once or twice a day.

The use of bitters is indicated in chronic affections of the liver. If there be any cases in which the bitter root (apocynum and roscemifolium,) may be used with advantage, it is in chronic affections of the liver. It must be given in pills, or the powder, taken in luke-warm water, but not in sufficient quantity to produce purging.

In every form of seated disease, when medicine is required, for many weeks, or even months, in succession, an occasional change

of remedy for an equivalent one, will be proper.

Dandelion.—The dandelion, either in the form of an extract or decoction, may be used with especial advantage in chronic disease of the liver.

I have observed symptoms indicating extreme torpor of the liver, brought on by retirement from active business. In such cases the patients should resume their former active habits.

SIG. HH.

### JAUNDICE.

#### SECTION LVI.

A diseased condition of the system is sometimes attended with obstruction of the natural passage of the bile, occasioning a yellow tinge in the skin and whites of the eyes, which is termed jaundice.

The digestive powers are always more or less weakened, and general coldness and torpor of the system prevails before the symptoms of jaundice appear. The suspension of the flow of bile may arise either from obstructions in the gall duets; from coldness and torpor of the liver, or from deficiency of nervous power; yellowness of the skin being merely a symptom arising from obstruction in the passage of bile into the bowels. A jaundiced appearance of the skin is very commonly observed in low forms of fever, arising from suppression of bile; thus yellow fever, as it is termed, receives its name from the yellow color of the skin.

"When people have what is called jaundice," says Dr. Thomson, "it is the prevailing opinion that they have too much bile, and it is said they are bilious. This is a mistaken notion, for there is no such thing as there being too much gall; it would be more correct to say there was not enough. The difficulty is caused by the stomach being cold and foul, so that the food is not properly digested; and the bile not being appropriated to its natural use, is diffused through the pores of the skin which becomes of a yellow color."

Symptoms.—The most obvious symptoms in jaundice, are, yellowness of the skin and whites of the eyes, loss of appetite, bad taste in the mouth, costive bowels, high colored urine, enfeebled mental powers, and a dry state of the skin. The pulse is frequently unaffected; it is sometimes slower, and at other times quicker than natural. Yellowness of vision is frequently one of

the first symptoms indicating the approach of jaundice, which may arise from the humors of the eye becoming tinted with the yellow coloring matter of the bile, and transmitting yellow rays of light. The patient is generally either restless and unable to sleep, or continues in a state of somnolency or stupor.

THE COLOR, in jaundice may vary from a light yellow to that of a deep green, or almost black.

LOCATION.—Jaundice is sometimes confined to the face and neck, in other instances it is diffused over the whole surface of the body and limbs.

THE APPROACH OF JAUNDICE.—Generally the disease comes on in a gradual manner, associated with symptons of indigestion; "a general feeling of languor; disinclation to bodily and mental exertion; an irritable and dejected temper; weakness of appetite; constipation; acid eructations; slow and painful digestion; flatulent pains in the bowels; a slight feeling of fullness and tension in the epigastrium, (pit of the stomach;) restlessness at night; a turbid urine, usually depositing a copious pitchy sediment; slow and languid pulse; more or less nausea; and frequent transient chills, alternating with flushes of heat." After these symptons have continued for a few days, a disagreeable itching over the whole body takes place; the taste becomes bitter; the stools whitish or clay-colored; the urine of a deep saffron hue; and finally the whites of the eyes, and the skin about the lips, neck, and forehead, assume a yellow color, which speedily extends itself until the whole surface acquires an uniformly yellow hue.

Sometimes the disease comes on suddenly, with severe pain and distress at the pit of the stomach, attended with frequent vomiting, and an entire disgust for food.

THE DURATION of an attack of jaundice is extremely varied. In some instances it passes away in the course of a few days, whilst in others it will continue for months, and occasionally the disease assumes the chronic form, in consequence of permanent derangement of the digestive functions, and continues for years, accompanied with symptoms of dyspepsia.

TREATMENT.—Jaundice being merely a sympton, arising from previous disease, it is to be overcome, or removed by correcting the derangement of the general health.

The symptoms being violent, the treatment must be thorough and early applied. A course of medicine should be given, and repeated every day or every other day, until the symptoms become more favorable. Besides a course of medicine, the compound lobelia pills may be given, together with an occasional dose of eapsieum in composition.

Tonics.—The most powerful kinds of bitters are required in jaundice. In sudden and violent attacks, the bitters may be employed after the symptoms abate, but when the disease comes on in a gradual manner, they may be employed from the first, in combination with stimulants. A tablespoonful of the expressed juice of green wormwood, added to an equal quantity of whisky, taken three times a day before meals, has been used by some with special benefit.

Dr. Thomson, in treating of jaundiee, says: "I have attended many eases of this kind, and never had any difficulty in effecting a eure. My method is to give No. 2, or the composition powders, to raise the internal heat, and No. 1 to cleanse the stomach, and promote perspiration; then give the bitters, No. 4, to regulate the bile and restore the digestive powers. If the complaint has been of long standing; and the system is much disordered, they must be carried through a regular course of medicine; and repeat it as occasion may require, and at the same time give the bitters two or three times a day, until the appetite is good and digestion restored."

Sometimes jaundice is occasioned by gall stones being lodged in the gall duets, attended with violent paroxysms of pain in the right side, near the pit of the stomach, and continued straining efforts to vomit, the stomach at the same time forcibly rejecting any thing that is swallowed. In a case of this kind, the vapor bath must be applied, and the system placed in a state of relaxation by lobelia administered by injections; together with full and frequent doses of the third preparation of lobelia, until the symptoms are relieved. Gall stones have been removed, in many instances, by the operation of emetics.

Straining efforts to vomit, when the system is warmed by the vapor bath, or by the application of hot bricks wrapped in damp

cloths, around the patient, and relaxed by the influence of lobelia, will form the surest means of removing obstructions, either in the gall ducts, or in the liver.

A warm stimulating poultice, applied to the pit of the stomach, will relieve the pain.

The warm foot bath, prepared in the manner described in the treatment for chronic disease of the liver, has been used with marked advantage in jaundice.

Celandine, agrimony, blood root, hemp seed boiled in milk, besides many other articles and compounds, have been recommended as specific remedies for jaundice, not one of which, however, can be relied upon. Although patients may recover from jaundice, under the use of celandine, hemp seed, or some other of the reputed specifics, there is no evidence that the disorder would not have been removed sooner under Thomsonian treatment. I have known jaundice cured by Thomsonian treatment after various other remedies and modes of treatment had been tried without success; but I have yet to see the first case cured by other treatment, after the Thomsonian practice, judiciously applied, has failed.

Change of Air.—In seated disorders, a change of residence will frequently be attended with a decided improvement in the general health.

Diet.—In jaundice the digestive powers are always weak, and therefore a strict attention to diet must be observed. In the commencement of the disease, and more especially if the symptoms be violent, the diet should be confined to the lightest kinds of food. In cases of long standing, it may be more nourishing, but it must be easy of digestion. As a general rule, in jaundice, butter, and all kinds of fat meats disagree with the stomach.

Attacks of bilious colic are frequently accompanied with a jaundiced hue of the skin, and whites of the eyes. And in females there is sometimes a yellow tinge in the skin, after an attack of hysteria. The same general course of treatment, however, will be adapted to all cases.

### APOPLEXY.

#### SECTION LVII.

Symptoms.—A sudden suspension of conciousness; a loss of the power of voluntary motion, stupor, heavy and laborious breathing, and a slow and full pulse, are the symptoms which characterize apoplexy.

An attack of apoplexy occasionally comes on suddenly, without any precursory symptoms. More commonly, it is preceded by giddiness, and a sense of weight and deep seated pain in the head, ringing in the ears, and dimness of sight. These symptoms may occur a few hours, or they may continue for a week, or even for months previous to the attack, and occasionally they disappear without the occurrence of an apoplectic fit.

In some cases the attack comes on suddenly, the patient sinking at once into a profound stupor, from which he cannot be in any degree aroused—resembling a deep sleep—and each expiration attended with a puffing of the lips, and a frothy saliva blown out with a sputtering noise. These cases generally prove fatal in a few hours. In other cases, the patient may be seized with deep seated pain in the head; sickness and vomiting; tremor of the limbs; dizziness; confusion of mind, and then gradually sink into a state of stupor, from which he will partially recover, so as to converse, and be able to sit up, and probably walk about, but will still complain of pain and distress in the head, attended with giddiness and confusion of ideas. After a few hours the brain becomes oppressed, and a state of complete insensibility ensues.

Sometimes an attack of apoplexy comes on with palsy of one side, loss of speech, pain in some part of the head, and vertigo; the patient retaining his conciousness. By degrees, the brain becomes more oppressed, and conciousness is gradually lost, until finally a deep stupor ensues.

Deep intoxication sometimes so nearly resembles apoplexy that it may be difficult to distinguish between them. The breath, however, will detect intoxication, together with the relaxed state of the muscles, particularly those of the jaws, the reverse of which occurs in appoplexy.

In cases of suspended animation and fainting, the pulse and respiration is almost imperceptible; whereas, in apoplexy, the pulse is strong, and respiration full.

Apoplexy always Dangerous.—When there is a total loss of consciousness, the respiration accompanied with deep snoring, a sputtering from the lips, loss of the power of swallowing, and the eyes fixed, the case may be considered as almost hopeless. Still we are informed that recoveries do take place, even after these symptoms have occurred.

DURATION OF THE APPPLECTIC ATTACK.—This varies from a few minutes to several days. Death seldom takes place before the second and third hour, and in some cases not until the fourth or fifth day from the commencement of the attack.

Medical writers of extensive observation, among whom I may mention Hippocrates, consider the occurrence of fever, in the early stage of apoplexy, a favorable symptom. Where the pupil of the eye will contract by the near approach of a lighted candle, when there is a warm and gentle perspiration, the breathing free and regular, without noise or sputtering, together with the ability to swallow, a gentle diarrhea, or when a copious discharge of urine is observed, hope may reasonably be entertained of a recovery.

Cause of Apoplexy.—The immediate cause of apoplexy in most instances, is pressure upon the brain, suspending the function of innervation, or the generation of nervous fluid.

One whose conformation of body is corpulent, with short neck and large head, and whose advanced age, or intemperate habits, have rendered his vital powers weak, will be liable to apoplexy from various causes.

The most usual exciting cause of apoplexy is over distention of the stomach, by excessive indulgence in eating food of difficult digestion; together with the intemperate use of alcoholic liquors.

Exposure to extreme cold, by exhausting the heat of the body,

and causing the blood to recede from the surface and form internal congestion, is capable of producing apoplexy.

Severely protracted chills have been observed to give rise to

this disease.

Positions of the body which favor a flow of blood to the head, or impede its return to the heart, stooping with the head low, lifting great weights, and wearing tight corsets have been known to bring on a fit of apoplexy.

It is only, however, where the predisposition to apoplexy exists

that it is liable to be brought on by such causes.

Among the occasional causes of apoplexy, may be mentioned excessive evacuations. The celebrated Boerhaave cites a case of apoplexy, apparently produced by excessive bleeding from the nose. Diabetes and cholera sometimes terminate fatally with symptoms of apoplexy. Excessive loss of blood is frequently followed by an extraordinary determination of blood to the brain. Experiments which have frequently been tried on animals by abstracting large quantities of blood, and finally by bleeding them to death, go to prove, as has been observed on dissection, that dropsy together with an engorged state of the blood vessels of the brain and spinal marrow, are a general consequence of excessive losses of blood.

TREATMENT.—Such means and remedies are indicated in the treatment of apoplexy, as are best adapted to equalize the circulation of the blood throughout the system, and restore the functions

of the brain, which are always suspended in this disease.

Injections.—These are of the first importance in the treatment of apoplexy. The third preparation of lobelia should be employed, or some other combination of lobelia; for instance, the lobelia powder and No. 6. One, two, or three tablespoonsful of the third preparation of lobelia may be administered at a time, in half a pint of luke-warm water, composition or bayberry tea. This must be frequently repeated, with a view to attract the circulation from the head; and thus lessen the pressure of blood upon the brain, and to arouse the nervous energy of the system to carry on the circulation with healthy activity.

EMETICS.—If a patient have an attack of apoplexy within a few

hours after a hearty meal, free vomiting will be imperatively demanded. The third preparation of lobelia must be poured into the mouth, and will be much more likely to be swallowed than a preparation of lobelia less stimulating. The impression of a powerful stimulant in the throat will excite the act of swallowing, and the medicine will be taken into the stomach, when the lobelia powder in luke-warm water, or composition tea, would fail to excite the act of swallowing, whilst the patient is unconscious. When the functions of the brain are suspended, as they are in apoplexy, large doses of medicine will be required in order to effect vomiting; or as an efficient aid to excite vomiting, the lobelia powder may be administered by injection in luke-warm water and retained. A tablespoonful of the powder may be used in the injection, which must be repeated promptly if necessary.

External Applications.—Warm applications to the feet, frictions to the surface, cold applications to the head, the vapor bath applied to the lower half of the body, and the surface bathed frequently with stimulants—pepper souce, No. 6, or the third preparation of lobelia—constitute the external means proper to be employed in the treatment of apoplexy. The head must be kept elevated, and the pillow occasionally turned over, or changed for another to keep the head sufficiently cool.

"A robust man," says Dr. Eberle, "about fifty years of age, fell down in a fit of apoplexy about an hour after taking a full meal of animal food, together with several glasses of brandy and water. The coma was profound, and the respiration sterterous and sputtering. He was immediately bled to the extent of about forty-eight ounces, but although the pulse was considerably reduced, no perceptible improvement ensued. Twenty grains of the sulphate of zinc were with difficulty introduced into the stomach, and free vomiting ensued in about ten minutes after. Almost immediately after the contents of the stomach were thrown off, he became better." The patient recovered. The sulphate of zinc, being an active poison, would have proved detrimental had it not been speedily thrown off. On account of the danger attending the administration of active poisonous emetics, most medical writers reccommend milder articles,—camomile tea, ammonia in water, or mustard in

warm water. But the sensibility of the stomach is generally too dormant to be acted upon by these milder remedies. Apoplexy, however, is a disease which frequently baffles all remedial means.

FAVORABLE SYMPTOMS.—When the stupor becomes less profound, with some degree of awakened sensibility; the breathing regular and not sterterous, or sputtering from the lips; together with a general warm perspiration, some hope may be entertained of a favorable issue.

PREVENTIVE MEASURES.—When symptoms arise which denote the approach of apoplexy, such as headache and giddiness, dimness of sight, numbness of the extremities, drowsiness, faltering of the tongue, night mare and stupor, a course of medicine should be given as the most efficacious means of preventing an attack.

### EPILEPSY.

### SECTION LVIII.

(CONVULSION FITS-FALLING SICKNESS.)

An attack of this disease is characterized by a loss of consciousness, and by a jerking or convulsive motion of the muscles. Sometimes the fit comes on suddenly, without any previous symptoms indicating its approach; at other times it is preceded by various symptoms of constitutional disorder, with giddiness, stupor, pain in the head, and confusion of mind. Some patients experience a sensation like that produced by a stream of cold vapor, commencing in the feet and gradually extending itself until it reaches the head, when the patient immediately becomes insensible. If the patient be standing or sitting when he is seized with a fit, he suddenly falls and is totally insensible, the eyeballs are distorted, the breathing greatly interrupted, the face swells, and convulsions ensue, which generally continue from five minutes to half an hour. In some cases the convulsive action of the muscles,

particularly those of the face, are frightfully violent; the whole face is agitated; the eyeballs roll; the lips and eyelids are convulsed; the tongue is often spasmedically thrust from the mouth, which with the grinding of the teeth, and foaming at the mouth, gives the countenance a horridly wild expression. Sometimes the teeth are firmly pressed together; at other times the jaws are widely and fixedly distended. The limbs of both sides of the body are equally convulsed in some cases, but more frequently the muscular powers are stronger on one side; and occasionally one limb only is affected with spasm. "The heart palpitates rapidly; the pulse is usually contracted, irregular and frequent; and respiration oppressed, laborious, and in violent cases, sonorous. About the termination of the paroxysm, a considerable quantity of frothy saliva usually flows from the mouth; and in some cases the fœces and urine pass off involuntarily." Sometimes the convulsions stop suddenly, but more commonly they decline gradually. The breathing becomes more free, the countenance assumes a more natural aspect. and the patient falls into a profound sleep. The patient is languid and stupid, and when he awakes, he has no recollection of what has passed.

The character of an epileptic fit varies greatly in different cases. In some instances it passes off in a few seconds—in others it continues for hours. The paroxysm is most apt to be protracted in *children*.

Some patients are subject to convulsions at *night* only; others are liable to an attack at any period of the day. With some, the fits come on at regular intervals. Dr. Eberle mentions a case where the paroxysm returned regularly on the night of each full moon.

Sometimes there will be but one paroxysm. In other instances the patient will have them in continual succession during a period of many hours, sometimes passing from one into another, until he has had twenty, forty, or even sixty fits, in the course of twentyfour hours.

Causes.—Convulsions may be caused by disease seated exclusively in the brain or spinal marrow; or the epileptic paroxysm may be induced by a disordered condition of the stomach or bow-

cls, the functions of the brain being thereby sympathetically deranged. Sudden fright has been known to bring on epilepsy. Excessive loss of blood has frequently led to convulsions.

In children, convulsions are often occasioned by undigested food in the stomach, and from worms in the stomach or bowels.

In some families the children are peculiarly liable to convulsions during the period of teething.

Small pox, scarlet fever, and measles are occasionally attended by convulsions, more especially just before the eruption appears; and also when the eruption leaves the surface for the internal organs, or as it is commonly expressed, when the disease strikes in. The use of laudanum predisposer children to epilepsy. Suppressed menstruation, and diseases of the uterine organs are sometimes attended with convulsions.

Venereal excesses and abuses, and the intemperate use of alcoholic liquors are among the exciting causes of epilepsy.

Distinguishing Symptoms between Epilepsy and Hysteric Convulsions.—In *epilepsy* there is a total loss of consciousness, whereas in hysteria some degree of sensibility remains.

- 2. The eyes are more distorted, and the face more suffused and livid in *epilepsy* than in *hysteric convulsions*.
- 3. In *epilepsy* there is usually foaming at the mouth, which is absent in *hysteria*.
- 4. In hysteria the paroxysm does not terminate in a deep sleep, as it does at the close of an epileptic paroxysm.
- 5. Hysteric convulsions are generally attended by involuntary paroxysms of laughing or crying, and a sensation of a ball in the throat, none of which accompany epilepsy. Epilepsy and hysteria may proceed from the same cause, the symptoms being of a more aggravated character in the former than in the latter.

TREATMENT.—An important indication in the treatment of epilepsy, and every species of convulsion is to overcome the spasmodic action of the muscles. The third preparation of lobelia is the remedy chiefly to be relied upon, this being the most efficient anti-spasmodic medicine in use. In many instances an attack of epilepsy may be prevented by the patient taking a tablespoonful or even a teaspoonful of the third preparation of lobelia, when the

first symptoms of an approaching attack make their appearance. Many persons, however, have no warning of the approaching paroxysm, but fall suddenly into a state of insensibility. The third preparation of lobelia may be given during the convulsions, without any risk of strangling the patient, the stimulous of the medicine in the throat sometimes exciting the action of swallowing, and thus the medicine will be easily taken into the stomach. When the third preparation is not at hand, the tincture or a simple tea of lobelia may be used.

EMETICS.—An oppressed or otherwise disordered stomach, is a frequent cause of convulsions in children demanding the use of emetics. If the convulsions be so strong as to prevent swallowing the medicine, it must be administered freely as soon as the paroxysm subsides, with a view to prevent a return of the convulsions. The third preparation of lobelia is the most efficient emetic. The lobelia, however, may be given in tincture, or the powder alone in lnke warm water.

Injections.—These when rightly prepared and administered, are as effectual in overcoming convulsions, as medicine taken into the stomach. They may be administered during the paroxysm, provided the convulsions do not prevent it.

In Adults who have been subject to frequent attacks of epilepsy, during several successive years, the disease often proves incurable. Yet an effort should be made, for in some instances cures have been effected, even under circumstances which have promised little hope of success. Whenever patients have warning of an attack several hours previous to its occurrence, a course of medicine should be administered, and whilst steaming, keep the head wet with cold water, or vinegar, or occasionally dash a tumbler of cold water in the face. If a full course be not given, the feet of the patient may be placed in warm water—an injection administered, followed by full and frequent doses of the third preparation or some other form of lobelia, and the head kept wet with spirits, vinegar, or cold water. A dash of cold water in the face, or the application of volatile salts to the nostrils, will sometimes prevent an attack, at least for a time.

Patients are apt to injure the tongue during the paroxysm of

epilepsy, unless prevented by the insertion of a pice of wood or cork, between their teeth. In cases of long standing, it may be useless to attempt to do more during a paroxysm, than to protect the patient from injury.

After a Paroxysm, in children, and in all cases where there is reason to believe that the disease is occasioned by a disordered stomach or bowels, an emetic must be given as soon as the patient can be made to swallow. If the stupor continue, injections must be administered. Vomiting may be effected in this way, by the lobelia powder, administered in warm water, and retained in the bowels.

When convulsions are caused by suppressed menstruation, or a disordered condition of the uterine organs, the patient must be kept warm in bed, stimulating enemas used to the bowels, warm applications to the feet, and an emetic given whenever the symptoms demand it. Thus, if a female be subject to epilepsy or even hysteria, at a certain time in the month, she should go through a course of medicine a day or two previous to the time when the paroxysm is apt to occur, and continue for several days the use of the means above mentioned.

Epilepsy is generally incurable when it is caused by an organic disease of the brain or spinal marrow. When it arises from other causes, such as indigested food in the stomach, affections of the bowels, liver, or uterine organs, a cure may be effected.

I knew an instance of a man in Baltimore who was cured of epilepsy by a single course of medicine. He had been subject to occasional attacks of the disease for about two years previous to his taking the course of medicine.

Exercise in the open air, a well regulated diet, cold shower bath in the morning, frictions of the surface, and tonic medicines will be proper means of invigorating the system.

## INFANTILE CONVULSIONS.

#### SECTION LIX.

Convulsions frequently occur in childhood, and more especially in infancy. During this tender period, the functions of the brain are liable to become disordered, or suspended, from various causes. In some large families of children, the predisposition to convulsions is so strong that every one of them will have fits during the period of teething. In other familes this form of disease is very rare, although the gums may be equally irritated and painful, and the digestion even more impaired

Causes.—Indigested food in the stomach, irritation of the gums from teething, or worms in the stomach and bowels, are the general causes of convulsions in infants and children.

The use of anodynes, laudanum, and various other preparations containing opium, predispose infants to convulsions by their tendency to produce congestion of blood on the brain. The following circumstance was related to me by a lady, intimately acquainted with the family in which the melancholy affair happened. A nurse wishing to visit a friend, gave an infant a dose of laudanum, that it might not need attention in her absence. Soon after it was given, the child was seized with convulsions, which continued to return at frequent intervals, requiring constant watching day and night up to the time when this statement was made to me, being a period of two years. The faculties of the mind were destroyed by the fits, with scarcely the possibility of remaining for life other than an idiot.

Thousands of children have their intellectual powers injured by being forced to swallow anodynes. Laudanum occasions sleep by producing partial congestion of the blood in the brain; and it eases pain by benumbing the sensibility of the nervous system.

Children are peculiarly liable to convulsions during the early

stages of eruptive disease,—small-pox, measles and scarlet fever. More especially are they apt to occur a short time previous to the eruption. On the event of the eruption striking in, convulsions are very frequently observed. In very young infants, the cold stage of "fever and ague" is sometimes accompanied by convulsions.

In children, as well as in adults, the cause of convulsions is sometimes seated originally in the brain or spinal marrow, rendering medical means unavailing.

FATALITY.—Death from convulsions, though of very rare occurrence in adults, in infants and children is by no means uncommon. "In ordinary constitutions there is but little to be apprehended from convulsions during infancy, when the attacks are slight and of short duration; and this observation applies especially to those instances which, instead of leaving the infant in a dull lethargic condition, are almost immediately succeeded by the natural cheerfulness of the child."

Unfavorable Symptoms.—When the convulsions are of long continuance, attended with a dark, or purple appearance of the countenance, palsy of one side, or of a limb, squinting, and difficult and sterterous breathing, the symptoms may be considered unfavorable.

TREATMENT.—Infantile convulsions are caused in the great majority of instances by constitutional disorder, the seat of which is in the stomach and bowels, and require for their cure that kind of treatment which is proper to cleanse the stomach and bowels, and restore their natural functions, and also to equalize the circulation of the blood and nervous fluid.

The first symptoms usually observed in convulsions are, a spasmodic contraction of the muscles of the chest and throat from loss of nervous power in these parts: the breathing is almost suspended, and congestion of blood on the brain ensues, followed by convulsions.

Anti-Spasmodics are especially indicated in the treatment of convulsions, of which the third preparation of lobelia is the best probably that can be used. I have never heard of an instance of a child being sufficient by stimulating medicine, but I know of

two instances in which death was occasioned by the use of castor oil. When stimulating medicine reaches the throat, instantly the windpipe is closed against its passage, and thus the medicine is conducted to the right passage to be carried into the stomach, notwithstanding the unconsciousness of the patient. When the sensibility is very low, a substance like castor oil might glide into the windpipe instead of the proper passage, and in this way occasion suffocation. It is only during the paroxysms that I would think of giving the third preparation of lobelia *alone* to a child, but I often give it in this way during convulsions.

THE THIRD PREPARATION OF LOBELIA, not only is the best antispasmodic, but it is also the most efficient emetic, containing sufficient stimulus to enable the stomach to act promptly. It may be given alone or combined with luke warm water, bayberry tea, or added to about twice its quantity of boiled milk.

In the absence of the third preparation, Lobelia may be given in the form of tea, made by adding warm water to the lobelia powder; or the powder mixed with an equal quantity of No. 6, and given in bayberry or composition tea.

A STIMULATING INJECTION must be administered as soon as practicable, and repeated as often as the circumstances of the case demand it.

When the convulsions subside, the use of lobelia should be continued with the view to prevent a return of the paroxysms, unless the patient have previously vomited freely.

THE USE OF INJECTIONS is particularly indicated on account of their tendency to attract the circulation to the bowels, and thereby lessen the pressure of blood upon the brain. If the patient remain in a state of stupor after the paroxysm, stimulating injections should be administered and the feet placed in warm water, a portion of mustard or capsicum added to it; or a vapor bath administered, the child being held in the parents or nurses lap.

If the head be hot, cloths wet with cold water or vinegar must be applied.

When the gums are swollen and irritated, benefit may be derived by cutting them down to the teeth.

Frictions and stimulating embrocations along the course of the spine will be found useful.

## CHLOROSIS-GREEN SICKNESS.

### SECTION LX.

The term chlorosis is applied to a form of disease in which there is marked paleness of the skin, absence of the natural red color of the lips, swelling of the eyelids, a soft and flabby state of the skin, loss of flesh, general coldness of the system, a tendency to a swelling of the feet and ankles, loss of appetite, and torpor of the bowels. The tongue is pale, swellen, and more or less furred. Menstruation is deficient, and sometimes this evacuation is entirely suppressed. There is frequently a craving for pickles, chalk, or cinders.

As the disease becomes more deeply seated, the countenance is still more pallid, and sometimes assumes a yellow or greenish appearance. "The skin is smooth, but is preternaturally dry. The tendency to dropsical swellings of the feet and ankles increase, but there is seldom any further wasting of the flesh. The tongue clears and becomes smooth, but continues pale, with a slight but peculiar appearance of transparency, and has a lilac hue. The patient is affected with languor, lassitude, and even serious weakness, being at once reluctant and unable to undergo fatigue." There are often severe attacks of pain in the side and head, palpitation of the heart, faintness and a sensation of suffocation. The bowels are inactive, with occasional attacks of diarrhea; the stools are dark, fætid and scanty. The digestion is always greatly impaired, yet patients will sometimes have a craving appetite for food, as well as for indigestible substances, such as tea leaves, coffee grounds, mortar from old walls, chalk, pickles, or charcoal, &c.

There is a peculiar tendency in this disease to a bleeding from the nose, stomach and bowels, or uterus. The blood discharged is pale and watery, sometimes scarcely producing a stain on linen.

AN ATTACK OF CHLOROSIS, though not free from danger, is generally curable by judicious treatment early applied, before the disease assumes an inveterate character.

In Chlorosis the amount of heat generated in the system is much less than is produced in a state of health; every organ in the body is in a torpid condition; the secretions are diminished, but little bile is formed; the mucous membrane of the stomach and bowels is coated with thicker secretions forming a false membrane; digestion, assimulation and nutrition, are imperfectly performed; and the blood is in a weak and impoverished condition.

TREATMENT.—The general course of treatment indicated for the cure of the above form of disease is as follows:

- 1st. To warm the system by the use of pure stimulants and external warmth.
- 2d. Courses of medicine.—To be administered as the circumstances of the case may demand.
- 3d. Injections to evacuate and tone the bowels, and also to act upon the uterine functions, through nervous influence.

4th. The continued use of pure stimulants and the strongest kinds of bitters or tonics. Gentle exercise, fresh air, and a light nourishing diet are important curative means in the treatment.

Course of Medicine.—There is no plan of treatment that can tulfil so many important indications for the cure of this disease as a course of medicine. Under its influence a new action is awakened throughout the whole system. The steam imparts warmth to the blood, equalizes its circulation, strengthens the nervous energy, increases the sensibility of the stomach to the impression of medicine, and for a time restores the functions of the skin, by which morbific matter is thrown off from the blood. The chest expands more freely, affording a greater supply of air to thelungs, thereby augmenting the vitality of the blood. By the emetic the stomach is relieved of matter which had oppressed its functions; the efforts to vomit whilst the system is relaxed tends to remove obstruction in the liver and in other important organs. The stim-

ulus of the medicine augments the secretions and occasions a determination to the surface. Injections relieve the bowels, and through the medium of the nerves exert a beneficial influence upon the uterine organs, the functions of which are always deranged in chlorosis. Lastly, but not least in importance, under the operation of the course of medicine, more or less of the false coating or "canker" becomes detached and removed from the coats of the stomach and bowels. This false membrane must be removed before the general health can be restored. I have known, on several occasions, quarts of a skinny-like substance discharged by the bowels in cases of chlorosis, which probably had been formed in the early period of the disease.

Repeating the Course.—As a general rule the course of medicine will require to be administered most frequently in the earlier period of the disease. When the disease has become deeply seated, and the system cold, torpid, and much weakened, it may not be necessary to repeat a course oftener than once in two or three weeks.

PREPARING THE EMETIC.—In all cases where there is great want of tone in the stomach, and a general torpor throughout the system, the liquid of the third preparation of lobelia is the most effectual emetic. It should be given in a very strong tea of bayberry or sumac.

Milk porridge, or gruel seasoned with salt and pepper, must be given both during and after the operation of the emetic.

Injections are necessary, not only to stimulate the bowels to action, but when properly prepared, they exert an influence over the functions of the uterine organs. Hence, during the menstrual period, or at the time that this evacuation is looked for, an enema composed of hayberry tea, adding a teaspoonful of the third preparation of lobelia; or of composition tea, adding a teaspoonful of lobelia powder, should be administered two or three times a day. The patient to be kept warm in bed, with warm bricks to the feet, and abdomen, or back, and an occasional dose of composition, capsicum, or spice bitters administered. The vapor bath should be omitted during the menstruation, unless the discharge should continue too long, and become very profuse. In chlorosis

the stomach is colder than natural, requiring the assistance of stimulants and tonics, in order to facilitate digestion. The time for taking the stimulants, more especially pepper, is at meals; and tonics immediately before or after.

The Compound Lobelia Pills may be used as a general medicine in all cases of chlorosis. Ten or twelve of these pills may be taken daily, and they furnish a moderate and permanent stimulus to the stomach and bowels, and exert a beneficial influence in correcting their secretions. When liquids oppress the stomach, or the patient prefers medicine in the form of pills to decoctions, tonics as well as the stimulants may be given in this form—such as quinine pills, and pills composed of bitter extracts.

Gum myrrh is a useful tonic in chlorosis. It may be formed into pills, and three or four taken after each meal, or the myrrh may be finely pulverized, mixed with quinine or bitter extracts, and the compound formed into pills.

White mustard seed or prepared charcoal may be used to aid in stimulating the bowels to action.

THE DIET must be light and nourishing, not to be confined however, to vegetables. Wild game, fresh beef and mutton, eggs, and whatever is found to agree with the stomach. Pastry and hot bread of every description must be avoided.

# HYSTERIA - HYSTERIC FITS.

### SECTION LXI.

Hysteria presents in different cases a great diversity of symptoms. It mostly occurs in paroxysms.

Symptoms.—At one time "the fit consists of excessive laughter alternating with crying or screaming; and at another with mental alienation, rapid and incoherent talking, singing, suffocating spasms in the throat, a wild and furious expression of counter-

nance, raving, gnashing the teeth, tearing out the hair, beating the breast with the hands, biting, &c. Occasionally these symptoms subside without terminating in convulsions. More commonly, however, convulsions of a terrific character speedily ensue." During the spasms "the body is usually rigidly bent backwards, or variously and most powerfully contorted; the breast is projected forward, and the head drawn backwards; the face is swollen; the tongue protruded, or the jaws firmly closed; the eyes rolling, prominent, and red; the teeth gnash; the fists are clenched; the arms spasmodically thrown about, and the abdominal muscles powerfully contracted; in short, the whole muscular system is thrown into such violent spasms that scarcely any effort of the bystanders is sufficient to restrain the contortions, or prevent the patient from being thrown out of bed."

"When the paroxysm ceases, the patient is left in an exhausted or stupid and somnolent condition, which in the course of an hour or two passes away without leaving any other affections than a feeling of general soreness, and a slight pain in the head and pit of the stomach."

Sometimes instead of spasms, stupor and insensibility ensue, the limbs are in a relaxed condition, the jaws firmly closed, the eyes shut, the countenance nearly natural, the breathing irregular, the pulse slow and regular, the extremities are cold, and the power of swallowing is lost. Young females sometimes remain in this condition many hours, or even the whole day or night.

CAUSES.—Indigested food in the stomach; sedentary habits; suppressed or difficult menstruation; damp and cold feet; and violent mental emotions—excessive joy or grief—are causes of hysteria.

Hysteria never occurs in childhood, it being almost exclusively confined to the period which intervenes between the fourteenth and fiftieth years. It is almost peculiar to females, still the disease, in a mild form, sometimes happens to men, more especially to those who lead a sedentary life, and are of a delicate and nervous temperament.

Patients subject to hysteric fits, are apt to feel a tenderness in some part of the spine when it is pressed upon, which fact has

led some physicians to view hysteria as a disease depending upon irritation of the spinal marrow. Other theorists contend that its seat is in the uterus, whilst others again locate the disease in the brain. It would be useless in a practical point of view, to attempt to sustain or refute any of these theories, as the disease, in all cases, must be treated upon general principles, applying the remedies to suit the emergency of the case.

TREATMENT.—Hysteric fits are generally preceded by extreme langour, coldness of the hands and feet, and distress at the pit of the stomach. At this period stimulants should be given,—capsicum, composition, or spice bitters. No. 6, essence of peppermint, or lavender brandy, may be also used to expel wind from the stomach. The feet should be placed in warm water, and volatile salts applied to the nose.

If the symptoms be not relieved by the above means, an emetic must be given, and the patient warmly covered, and warm bricks applied to the feet.

The Vapor Bath.—Warm vapor applied to the surface soothes nervous agitation, and is signally beneficial in all cases of hysteric affections. When the system is very cold, the bath preceding an emetic, will materially assist the operation of the latter.

Injections.—Stimulating enemas are scarcely less important, both as a preventive and curative means in hysteria. The liquid of the third preparation of lobelia, or the lobelia powder in No. 6, is to be administered in warm water, bayberry, composition, or skull-cap tea. When there is a violent determination of blood to the head, the use of stimulating enemas are particularly called for, as they prove an efficient means of equalizing the circulation of the blood, and of sustaining and equalizing the nervous influence. Mustard plasters applied to the feet, ankles, and wrists, may have a beneficial influence in soothing nervous agitations.

Anti-spasmodics.—The third preparation of lobelia is the best anti-spasmodic, and it also answers as an emetic and stimulant. This medicine may be given in teaspoonful doses at any time when the patient can swallow. Even during hysteric convulsions, the liquid of the third preparation poured into the sides of the mouth when the teeth are firmly closed, will have an influence in

shortening the paroxysm, even though the medicine should not be swallowed.

Musk may be employed with benefit in hysterical paroxysms. The high price of the article, however, together with the circumstance of its being rarely found in the shops free from adulteration, has occasioned the almost entire abandonment of its use in practice.

Castor.—This is a stimulant and anti-spasmodic, and may be used in hysteria. The dose is from ten to twenty grains, given in a bolus, or rubbed up with clm powder, and then sufficient water added to make it easy to swallow.

When violent paroxysms of hysteria takes place in consequence of a sudden check to the flow of the menses, stimulating enemas to the bowels must be administered, in addition to the general treatment above mentioned. A tablespoonful of the third preparation of lobelia may be administered at one time, in severe cases; or two teaspoonsful of spirits of turpentine, rubbed with a little dry elm powder, or beat up with the white of an egg, adding a teaspoonful of the third preparation of lobelia, and half a pint of warm water, or simple herb tea. The enemas are to be repeated until the desired effect be produced.

Warm fomentations are useful to relieve pain in the chest or abdomen. If the head be hot, cloths wet with cold water, spirits of vinegar, may be applied, and changed frequently.

"In that variety of paroxysmal hysteria," says Dr. Ebcrle, "in which the patient lies in a state of torpor and insensibility distinct from syncope, I know of no remedy so effectual for dispelling the attack as an emetic." If the patient cannot be made to swallow, lobelia administered to the bowels in full doses and retained, will have the same effect upon the system as when taken into the stomach. A mustard plaster, or pepper poultice applied to the pit of the stomach, will aid in exciting vomiting. When mustard is employed it should be removed before it blisters the skin.

During violent paroxysms of hysteria, it will be useless, in many instances, to attempt to administer medicine until the spasms subside. As soon as the spasms give way, and the patient can swallow, an emetic should be given, with a view to prevent the

return of the convulsions. The best form of emetic in all such cases is a large teaspoonful of the liquid of the third preparation of lobelia, with about an equal quantity of lobelia powder, mixed in a teacup two-thirds full of bayberry or sumac tea. The emetic is to be repeated until vomiting be effected. Acids in the stomach interfere with the operation of emetics, and whenever the emetic is slow in its operation, a teaspoonful of the bi-carbonate of soda, or half the quantity of saleratus should be given, dissolved in a teacupful of luke-warm water.

Chronic Hysteria.—Unmarried females whose digestive powers are greatly impaired, who are of a weak habit of body, and possess an easily excited temperament, and more especially those who are subject to profuse or too frequent menstrual evacuations, are peculiarly liable to hysteric symptoms. "They are always complaining of some unpleasant or painful sensations; their temper is variable, often fretful, sometimes animated, talkative, and anon peevish and gloomy; they pass often rapidly from laughing to crying, from gaiety to melancholy, from despondency to hope, and vice versa, from the most trifling causes. They often complain of various distressing sensations in the abdomen, head, and chest, flatulency, a rumbling noise in the bowels, severe colic pains, a sense of weight and bearing down in the region of the uterus, pain in the neck of the bladder, dysury, a feeling of emptiness or fullness and tension at the pit of the stomach, variable appetite, slow digestion, eructations, occasional spells of great anxiety and alarm, palpitation of the heart, faintness, a peculiar sensation of weight, or of numbness in the top of the head, severe pains in the head, breast, or other parts of the body, and sometimes the sensation of a ball rising in the throat.

TREATMENT OF CHRONIC HYSTERIA.—Hysteric symptoms that have been of long continuance, can be cured only by restoring the general health of the patient To accomplish this, an occasional emetic, or course of medicine, stimulants and tonics, are the remedies chiefly to be employed.

Dr. Dean, of Harrisburg, Pa., observes: "in some cases where the patients had labored under this disease for ten years, and during that time had, by the advice and directions of respect-

able physicians, exhausted, with at most, but temporary benefit, the whole class of remedies which are usually prescribed, I have, by the continued exhibition of vomits, either entirely removed the complaint or so far removed the habits of diseased action in the stomach, that anti-spasmodic and tonic medicines would in general complete the cure." (Eberle.) The proper time for giving an emetic or a course of medicine is when the patient feels more distress than usual.

Tonics.—Gum Myrrh is a useful tonic in hysteric complaints, when the disease is associated with an excessive flow of the menses. The myrrh should be finely pulverized, and formed into pills, three or four of which may be taken after meals; or a decoction made of it by steeping it in boiling water.

Other tonics, such as columbo, gentian, balmony, unicorn root, barbary, Virginia snake root, and prickly ash, may be employed, either simply or in combination.

When the patient has a craving for some particular substance, such as acids, chalk, or charcoal, they should be used unless they are found to disagree with the stomach.

I have in several instances known patients to eat freely of bread and butter dipped in vinegar, which agreed with the stomach.

Charcoal is decidedly beneficial where the bowels are habitually constipated, or when the patient is harassed with sour eructations or heartburn.

When the bowels are habitually costive, to use injections of a decoction of aspen poplar and bayberry bark at bed time, and retain them until morning, will relieve the bowels and at the same time increase their strength and tone. Purgative medicines must be avoided, for notwithstanding they may afford momentary relief, yet eventually the functions of the bowels will be always weakened by them. By a proper course of constitutional treatment, joined with a well regulated diet and regimen, and an abandonment of cathartic medicine, the functions of the bowels will become restored, unless there be an organic derangement, stricture of the rectum, for instance. I have in repeated instances been surprised to find the bowels recover their function so as to be moved naturally in so short a period under such a course of treat-

ment as above alluded to. Yet where patients have been habitually costive for many years, and the bowels seldom moved unless provoked by a cathartic, the free use of charcoal and bitters, stimulating injections to move the bowels, together with the injection at bed time, as before mentioned, the use of bread made of unbolted flour, or gruel made of the same material, besides other articles of food that are nourishing and easy of digestion, will generally prove successful in restoring the natural action of the bowels in the course of a few weeks. Injections composed of salt and molasses, each a tablespoonful, adding a pint of luke warm water, and a teaspoonful of green lobelia powder, will sometimes succeed in procuring a passage from the bowels when the usual stimulating injections have failed.

## ST. VITUS' DANCE.

### SECTION LXII.

SYMPTOMS.—It commences with twitching or jerking of the muscles of some portion of the body, generally first observed in the face, or in one of the limbs. These sudden contractions of the muscles are usually slight at first, occurring only occasionally, and more particularly when the mind is grieved or agitated. By degrees these jerking motions increase, until, in many instances, almost every muscle in the body is affected with spasmodic contractions. In many instances the contractions are much stronger on one side of the body, and frequently they are confined almost exclusively to the left side. "From the imperfect command of the will over the voluntary muscles, the patient, when he attempts to walk, has a starting, hobbling, and irregular gait, with an awkward dragging of one of the legs." Sometimes the arms and legs are thrown into such confused motions, that the patient will be unable to walk, or even to stand alone. He is often unable to direct his hand to his mouth, requiring to be fed by another person.

"At first the expression of the countenance, in the intervals of the spasmodic motion, is that of good humor and contentment." In a later period of the disease, however, the countenance loses its expression of cheerfulness, the temper is irritable, and sometimes the intellect is enfeebled. "Slight paralysis occasionally occurs on one side of the body."

When the patient sleeps, the jerking motion of the muscles is entirely suspended.

Patients affected with St. Vitus' Dance are generally worse at a particular time of the day.

The appetite is variable; sometimes voracious—at others feeble. The tongue is slightly coated, and generally somewhat contracted. Digestion is more or less impaired; the bowels are usually inactive, and the stools seldom have a healthy appearance.

St. Vitus' dance is usually confined to the period of life which intervenes from the eighth to the twentieth year.

Causes.—Constitutional disorder, more especially in a deranged condition of the digestive organs, is the chief cause of St. Vitus' dance. Among the occasional causes of this disease are, violent mental emotions; sudden fright, or anger; "repelled cutaneous eruptions;" suppression of the menses; and exposure to cold and damp.

Nor Dangerous.—St. Vitus' dance very rarely proves fatal. The few instances that have been known to terminate fatally, with "slow irritative fever" have probably been experimented upon by medicines which have poisoned the stomach, and destroyed the vital principle.

DURATION.—In some instances this disease continues only a few days; in others it is prolonged to many months, or even years. When the disease is wholly dependent upon a disordered condition of the stomach and bowels, it is more readily cured than when it has been brought on by sudden alarm, or other violent emotions of the mind. Girls attacked with St. Vitus' dance, about the age of thirteen or fourteen, are seldom permanently cured until menstruation becomes fully established. The disease is also apt to become protracted when associated with chronic derangement of the general health.

TREATMENT.—The following plan of treatment I have known to succeed in curing several cases of St. Vitus' dance, viz: In the first place, give broken doses of lobelia, sufficient to occasion slight nausea; a course of medicine administered occasionally; a shower bath every morning, sometimes preceded by a vapor bath; and as the tongue begins to clean, or the skin becomes pale, and the system relaxed, give tonics.

On administering broken doses of Lobelia.—Lobelia may be administered in the form of pills, tineture, or the powder mixed in warm water. In some cases I have found it necessary to give as much as a teaspoonful of brown lobelia powder at a time, and this frequently repeated in order to effect even slight nausea. I have been surprised at observing the slight effect produced in even young children, by full doses of lobelia. In the case of a little girl laboring under St. Vitus' dance, the brown lobelia powder was given in full doses, and frequently repeated without producing the slightest nausea, or causing any perceptible degree of relaxation, until several courses of medicine had been given. At the end of the third week from the commencement of the treatment, the patient became much distressed and deathly sick under the influence of lobelia administered after the vapor bath. She tossed about in every direction, and continued in this way six or seven hours, the system being much relaxed. After this operation, the patient began to mend rapidly. The compound lobelia pills are convenient to take, and may be used with as much benefit, probably, as any other form of lobelia. From twelve to twenty pills should be taken daily, and continued as long as the disease remains.

THE VAPOR BATH is particularly beneficial in St. Vitus' dance, especially when the skin is in an unhealthy condition. The bath may be repeated daily, or every few days, as the circumstances of the case may indicate. After steaming, the patient must be showered with cold water, rubbed dry, and the surface bathed with No. 6, or some stimulating liniment.

EMETICS.—These may be given once a week, or at longer or shorter intervals, as the character of the symptoms may demand. Brown lobelia powder, infused in strong composition tea, is a

proper form of emetic to administer to children. Lobelia administered by injection, in warm water, and retained several minutes, will occasion vomiting and relax the system as effectually as when swallowed. I have been sent for on several occasions where familes have become alarmed by the extreme relaxation occasioned by lobelia injections. All that is required is to bathe the face, breast, and hands with spirits, or vinegar and water. It is well, however, to give occasionally some stimulant, No. 6, capsicum tea, composition, or even simple herb teas, pennyroyal or mint, together with some light nourishment-milk porridge or chicken tea. I never knew an instance of St. Vitus' dance in which the disease did not moderate after the patient was fully relaxed under the influence of lobelia. I have on several occasions, however, given from six to eight teaspoonsful of lobelia powder to patients laboring under this form of disease, without causing any perceptible relaxation, or effecting even slight sickness; and then again, at another stage of the disease, one teaspoonful, or even half that quantity, will operate effectually both in cleansing the stomach, and relaxing the system.

The Cold Shower Bath is much employed in the treatment of St. Vitus' dance. This remedy is particularly appropriate in the more advanced stage of the disease, after the stomach has been thoroughly cleansed. The proper time for administering the cold shower bath, is in the morning, as soon as the patient is out of bed. After the bath is administered, the patient must be rubbed dry, wrapped in a blanket, and put in bed, and remain there half an hour, or longer.

Tonics.—The spice bitters may be used in any period of the disease. In the more advanced stages of it, stronger tonics will be required. Quinine, wormwood, centuary, balmony, golden seal, or Virginia snake root. The scull cap (scutellaria lateriflora) may be employed both as a tonic and nervine. It may be taken singly in decoction, or combined with other tonics.

INJECTIONS.—When the bowels are very costive, injections may be used occasionally composed of salt, molasses, and water, adding an even teaspoonful of green lobelia to each injection. Lobelia administered by injection, and retained, will benefit the

patient as much as when taken into the stomach. When the disease has been of long continuance, however, or the patient feeble and emaciated, the vomiting will be best effected by the third preparation of lobelia taken into the stomach.

ASTRINGENT, OR ANTI-CANKER MEDICINE.—In the latter stages of the disease, or during any period when the tongue is coated and manifests a tendency to clean, a strong decoction of bayberry or sumac, or of the two combined, must be given as often as once a day. In every case of St. Vitus' dance that I have attended, there has been a false membrane discharged from the bowels, and flakes of a similar substance thrown off by vomiting, about the time the disease gives way. Indeed I have sometimes been inclined to believe that a coating of thickened secretions over the mucous membrane of the stomach and bowels was a principal cause of the disease being protracted. The fact that patients recover soon after such a substance is observed to pass from the bowels, furnishes some proof in support of this opinion. May it not be the presence of a false membrane lining the stomach that renders this organ so extremely insensible to the impression of lobelia, observable in many instances in St. Vitus' dance.

The No. 3 pills will answer in place of the astringent teas, and are much more readily taken. From three to six of these pills may be taken three or four times a day on an empty stomach.

SEA BATHING has been found particularly beneficial in the cure of St. Vitus' dance.

The Dier must be nourishing, and easy of digestion, such as boiled milk and toast, stale bread, crackers, fresh beef and mutton, poultry, eggs, custard, boiled rice, and all wholesome vegetables. All kinds of confectionary, cakes, hot bread, and pastry, must be avoided. The supper should always be light.

When St. Vitus' dance is dependent upon, or associated with obstructed menstruation, the method of treatment already laid down will be appropriate to the case. Particular attention, however, will be necessary to keep the feet dry and warm, and to use frequently warm foot baths. When the period arrives when the patient expects to be unwell, stimulating enemas should be ad-

ministered to the bowels, composed of pennyroyal tea, adding a teaspoonful of lobelia powder to each, or of bayberry tea, with the addition of a teaspoonful of the third preparation of lobelia; the foot bath used daily, and the patient drink freely of composition or pennyroyal tea, and if the general health be much deranged, an emetic given. If there be much pain in the back or loins, the patient should be kept warm in bed, and bottles of hot water or hot bricks, wrapped in damp cloths, applied to the back and feet.

# TETANUS-LOCKED JAW.

### SECTION LXIII.

Causes.—Locked jaw is sometimes caused by wounds; in other instances it is brought on by exposure to cold, when the vital powers are in an enfeebled condition. Sleeping in the open air, is very commonly an exciting cause of tetanus in hot climates. The use of narcotic poisons may also occasion tetanus. Wounds of the head, gun-shot wounds, and punctured wounds in the soles of the feet, and palms of the hands, are the kinds most apt to occasion locked jaw. "Tetanus is particularly apt to follow wounds in which a nerve is partly divided or lacerated, without being completely divided."

Symptoms.—This formidable disease usually comes on in a gradual manner. At first there are pains and stiffness in the back of the neck, slight spasms in the muscles of the throat, and distress at the pit of the stomach. In some instances these symptoms continue several days before the jaws become fixed. As the disease increases, the jaws become stiff and at length immovable; great distress is felt at the pit of the stomach; the whole, or a part of the muscles of the body and limbs become rigidly and permanently contracted—the head is thrown backwards, and the body is bent either backwards, forwards, or sidewise. Sudden paroxysms

of pain, and retraction at the pit of the stomach occur at frequent intervals, attended with violent spasmodic contraction of the muscles. "These paroxysms last usually but a few minutes—the muscles of the trunk and extremities resuming for a while, a comparatively relaxed state; but those of the jaws remain firmly contracted during the remissions. In the latter period of the disease, the spasms remit but slightly and transiently; the patient is in an almost continued rack of torture; the muscular contractions are general and extremely violent; the countenance becomes frightfully distorted; copious sweats break out; the pulse is quick and irregular; the respiration hurried and laborious; the voice grating and unnatural; the eyes dim and watery, and the jaws immoveably locked. Towards the fatal termination of the disease, slight delirium generally occurs. At this period a severe spasm often terminates the scene."

"The usual mode of termination in fatal cases is by apoplexy. In some instances, all the muscles become completely relaxed a short time before death takes place. The patient seems to have emerged from his terrible malady. Every part of the body is in the ordinary state of relaxation. Suddenly, however, extreme prostration of strength ensues. He becomes insensible and comatose; the countenance assumes a cadaverous expression, and death speedily follows."

DURATION.—Locked jaw usually terminates before the fifth or sixth day. Occasionally, however, the disease is protracted for weeks.

FAVORABLE SYMPTOMS.—The remissions between the paroxysms becoming complete, and of longer duration; a tingling sensation in the extremities, as if ants were crawling over the parts; a moist, and uniformly warm skin; an increased flow of saliva from the mouth; "and above all when the patient enjoys sleep," strong hopes may be entertained of an eventual recovery.

Locked jaw occasioned by causes which operate upon the system generally, such as sleeping on damp ground, or sudden exposure to extreme cold, is in general less fatal than when the disease is caused by wounds.

PREVENTIVE MEANS IN CASE OF WOUNDS.—For severe wounds, sig. ll.

more especially gun-shot wounds, especial care should be observed to prevent the admission of cold or damp air to the wound. This will be the surest means of protecting the patient from locked jaw. Warm stimulating poultices must be applied to the parts to favor suppuration.

When a punctured wound is received in the palm of the hand or sole of the foot, for instance, from a nail or pin, the wound should be cut open, and No. 6, or spirits of turpentine poured in, and this repeated several times a day, and a warm poultice applied, with a view to occasion suppuration. Locked jaw rarely or never occurs from such wounds when they discharge matter. "It has been observed," says Dr. Ewell, "that the less inflammation there is in the injured part, the greater will be the liability to tetanus. This circumstance has suggested the propriety of exciting inflammation in the wounded part by means of irritating applications." In almost every instance where locked jaw has been brought on from punctured wounds, as when a nail has penetrated the foot, the disease has not appeared until after the wound has closed, and the part free from inflammation.

If the patient be dyspeptic, or the general health otherwise deranged, a course of medicine must be given, followed by the free use of composition or capsicum, with a view to keep a determination to the surface. "An equable and comfortable temperature, with a simple diet, and rest, are important auxiliaries in preventing this disease after wounds."

TREATMENT OF LOCKED JAW.—On the first appearance of symptoms which indicate the approach of locked jaw, such as slight spasms in the throat, a sense of stricture and distress at the pit of the stomach, and stiffness in the neck and shoulders, a thorough and persevering course of treatment must be instituted. The means chiefly to be relied upon, are vapor baths, the third preparation of lobelia, and powerfully stimulating injections.

A full course of medicine must be administered without delay; after which the third preparation must be continued in teaspoonful doses, in bayberry tea, repeating the dose every hour or two as the circumstances of the case may require. When the symptoms are severe, the third preparation may be given in tablespoonful

doses, and repeated as often as every half hour, until the symptoms assume a more favorable aspect, when the quantity may be lessened accordingly.

Steaming is highly important in the treatment of locked jaw, and in the early stage of the disease, and when the patient can sit up without difficulty, the vapor bath should be administered two or three times a day. The patient should be dashed with cold water at the close of the steaming, and after being rubbed dry, the surface bathed with No. 6, and when the patient is in bed, hot bricks, or bottles of hot water, wrapped in damp cloths, applied to the feet.

Injections.—Composed of a teaspoonful, or even a tablespoonful of the third preparation of lobelia, in bayberry or composition tea, must be administered at intervals of every two or three hours. The strictest caution must be observed to protect the patient from the influence of cold air on getting out of bed, when he is in a perspiration. Unless the air in the room be at the summer temperature, the patient should continue under the bed clothes.

When there is great difficulty in swallowing, the injections retained several minutes, and frequently repeated, will prove nearly, or quite as beneficial as if the medicine were taken into the stomach.

When the spasms are violent, a tablespoonful of lobelia powder may be administered occasionally by injections in luke-warm water, and retained, with a view to relax the muscles. When the third preparation of lobelia can be retained in the bowels, it should be used in general, in preference to the simple lobelia powder.

Wine Whey, or wine alone, may be given in large quantities. Wine whey not only affords a stimulous, but it supplies the system with nourishment. The difficulty of obtaining pure wine, more especially in the country, is the chief objection to the employment of this article. Madeira and Sherry are the most suitable, the latter to be preferred on account of its being free from acid, when pure. Quarts, and even gallons of wine have been used daily in cases of locked jaw, with success. If, however, the disease be occasioned by a gun-shot or other wound, attended with

inflammation, and the patient have a dry tongue, and hot skin, wine alone will be apt to form acid in the stomach and aggravate the symptoms.

LOCAL TREATMENT.—If the disease arise from a gun shot wound, or from any injury attended with sloughing, or with symptoms of mortification, a poultice should be applied, prepared in the following manner, viz: To a pound of wheat flour, add half a pint of yeast, and a large tablespoonful of fine ginger, and after mixing them well together, set the mixture by the fire until it begins to rise, then spread and apply it. The poultice must be kept warm, and changed morning and evening.

When a punctured wound is the cause of locked jaw, the wound should be opened with a lancet or other instrument, and every effort used to excite inflammation and the formation of matter, by pouring spirits of turpentine in the fresh wound, and applying warm stimulating poultices, such as a mixture of slippery elm and cayenne pepper. If the injury be on the hand or foot, the part should be steamed occasionally in order to attract an afflux of blood to the part, and favor the formation of pus.

Either a mustard plaster or pepper poultice must be kept applied to the spine, extending from the nape of the neck eight or ten inches down the back. The mustard should not be allowed to cause a blister.

The Dier must be nourishing and easy of digestion, such as wine whey, essence of beef, chicken tea, oysters, eggs, custards, milk porridge, &c.

## HYDROPHOBIA.

### SECTION LXIV.

(BITE OF A MAD DOG, OR OTHER RABID ANIMAL.)

This terrific disease is occasioned in the human system by the bite of a rabid animal. The poisonous saliva from the mouth of the animal is conveyed by its teeth into the wound, and when absorbed and carried into the system, brings on hydrophobia.

When this dreadful disease becomes firmly scated in the system, there is scarcely the possibility of effecting a cure by any medical treatment. Therefore when an individual is bitten by a mad animal, the most prompt measures should be used to prevent the absorption of the poison which may have been deposited in the wound. The most important preventive means, is cutting out the parts that are bitten, or burning with a red hot iron, or with caustic potash.

Hydrophobia seldom occurs until three or four weeks after the bite is inflicted. More commonly the disease does not become developed until the sixth or seventh week after the insertion of the poison. "It is said that the disease comes on much earlier in hot climates than in temperate latitudes." The disease however, may generally, if not always be prevented by cutting out the parts bitten, or by cauterizing it with a red hot iron, down deeper than the wound itself.

When persons are bitten through their clothes, the poisonous saliva will in general be rubbed from the teeth as they pass through the clothing. Thus many who have been bitten by mad animals have escaped hydrophobia without having the wound either cut out or cauterized with a red hot iron, having relied upon some re puted specific, such as elecampane stewed in milk, or other equally simple preparation, which could have had no possible effect in preventing the absorption of the poison, if it had been

deposited in the wound. It is doubtful whether hydrophobia was ever prevented in a single instance by any of these reputed preventives. The reason why the disease has not come on when no other means have been used than those falsely called preventives, is simply because the *poison* was either rubbed from the teeth of the animal by the clothing, or from some other cause did not happen to be deposited in the wound.

A case of hydrophobia occurred not long since in Lancaster county, Pa. The patient after being bitten by a mad dog, used no other means to prevent the disease than a preparation that was supposed to be a certain preventive to the disease. Poison, however, happened to be deposited in the wound, and being allowed to remain there, it was absorbed, and by contaminating the system. brought on hydrophobia, of which the patient died.

Means to be employed to prevent Hydrophobia.—Any one on being bitten by a mad dog, or other rabid animal, should immediately have the wound washed with cold water, and then, as soon as possible, have the surrounding flesh cut away, as deeply as the wound had penetrated, or sear the whole of the wound with a red hot iron, or with caustic potash, in order to remove or destroy the poison. The sooner the parts are cut away, or cauterized, after the bite, the more certainly will it prevent hydrophobia. If this should have been neglected at first, even for several days after the bite, it should still be done. Dr. Marshall Hall on the treatment of hydrophobia makes the following observations: "But the most important point in practice is to excise the part on which the bite has been inflicted, early, nay immediately, if possible, but late rather than not at all: indeed it is not too late if the symptoms have not yet appeared."

Besides the local treatment above mentioned, constitutional treatment should at once be instituted, with a view to assist the constitution to expel the poison from the system, in case there should be a portion of it absorbed. A course of medicine must be administered every few days, and the patient take broken doses of lobelia; drink skull cap tea; keep the bowels regular by the use of injections; have a vapor bath administered every day, and use light nourishing food. When the above preventive measures are

early employed, there would be scarcely the possibility of the occurrence of hydrophobia.

SYMPTOMS OF HYDROPHOBIA.—"The only symptom which is never wholly absent in this disease, as it affects the human species, is the extraordinary dread or horror of liquids—more especially of water. Patients laboring under rabies, may indeed sometimes experience a temporary abatement, or even absence of this torturing symptom, but in all instances it occurs in a greater or less degree, and generally remains throughout the whole course of the malady. In general the mere sight of liquids, or the sound of pouring water from one vessel to another, brings on violent suffocative spasms; and the attempt to swallow water, or to bring it to the lips, commonly excites a degree of horror and agitation truly frightful. Even the sight of polished surfaces, as of a mirror, or the rustling sound of bed curtains, or of running water, will in the more violent grades of the disease, immediately renew the spasms and feeling of horror. Occasionally, however, this extraordinary horror is only manifested against water; for patients have been known to take small quantities of other fluids, as of soups, milk, and wine, in a luke warm state. The thirst is always extremely urgent, and although the suffering from this source is generally very great, the patient does not attempt to swallow any liquids. The secretion of saliva is profuse, and from an inability to swallow it, the patient continually spits it out in every direction, often desiring those around him to stand aside, as conscious that he might thereby injure them. During the whole course of the disease occasional remissions occur. Whilst these continue, the patient often appears calm, talks deliberately about his feelings or his affairs, and cautions those about him not to approach him too closely when under the paroxysm of madness, lest he should injure them. Notwithstanding this partial calm, there is always a peculiar wildness and appearance of alarm in the expression of the countenance; the motions are quick and hurried; the eyes cast about with an air of suspicion; and if the patient attempt to lie down and obtain some rest, he usually soon starts up again with great agitation and anguish of feeling. During the exacerbations, the expresssion of the countenance is wild, furious, agitated, and agonizing; the eyes are blood-shot, sparkling, projecting, and expressive of rage and terror; the muscles of the face, throat, and chest, and sometimes of the extremities, are thrown into spasms; respiration is interrupted or convulsive; the arms are thrown about; the fists clenched; the teeth violently gnashed; the mouth foaming; with an unconquerable disposition to bite everything that comes within the patient's reach. In violent paroxysms furious and maniacal ravings occur, attended often with an entire absence of consciousness. These paroxysms usually last from about fifteen to thirty minutes."

There is seldom any fever in hydrophobia, except sometimes in the later period of the disease. The pulse is generally natural, except towards the termination of the disease, when it becomes quick, irregular, and weak. The countenance is pale, except during the paroxysms—then the face is turgid and flushed. The power of generating heat in the system is almost suspended, the patient being extremely sensitive to cold and shudders at the slighest gust of air. The skin is dry and constricted, the bowels inactive, "and the blood drawn from a vein is often dissolved and very fluid."

DURATION OF THE DISEASE.—Hydrophobia, in most instances, terminates fatally by the second or third day from its commencement. It has, however, occasionally been protracted to the four-teenth or fifteenth day.

TREATMENT.—When symptoms of approaching hydrophobia appear, such as spasms in the throat, and a dread of water, prompt and energetic treatment must at once be instituted. The vapor bath, and preparations of lobelia are the means chiefly to be relied upon.

Third preparation of Lobelia.—This must be given in table-spoonful doses, and frequently repeated. Injections composed of two or three teaspoonsful of lobelia powder in luke-warm water, must be administered and retained, with a view to relax the system and equalize the nervous influence. This form of injection should be repeated, so as to cause the system to be continually relaxed. A tablespoonful of the third preparation of lobelia may be occasionally added to the injection, for the purpose of stimulat-

ing the peristaltic action of the bowels, and to aid the curative efforts of the constitution to resist the disease. When the patient cannot swallow liquids, *injections* are to be chiefly relied upon-Especial care will be necessary to protect the patient from the influence of cold air.

THE VAPOR BATH.—From experiments that have been made in France, the vapor bath promises to be the most effectual means for the cure of hydrophobia that has ever yet been tried. A physician in France, by the name of Buisson, who, on being attacked with symptoms of hydrophobia, went into a vapor bath at the temperature of 140°, and after remaining there some time, all the symptoms of hydrophobia left him, and he came out of the bath entirely cured. This took place on the first onset of the disease, the only time, probably, when this or any other remedy will prove successful. M. Buisson, in a paper which he read before the Paris Academy of Arts and Sciences, wherein he details his own case, asserts also that he had, since this experiment upon himself, treated eighty cases of persons bitten by mad dogs, and succeeded by the use of vapor baths, in curing or preventing the disease in every case, except in that of a child who died during the treatment.

There cannot be a doubt that the vapor bath is the most effectual means of removing poison from the blood. The bath should therefore be early and perseveringly applied, keeping the patient in as long as it can be borne, which, in some instances, will be several hours. The temperature of the bath should be as high as the patient can bear. About the time the patient is to leave the bath, a full dose of the third preparation of lobelia should be given. The bath must be repeated at frequent intervals, say every few hours, as long as it promises any hope of being successful.

SIG. MM.

## NEURALGIA-TIC DOULOUREUX.

#### SECTION LXV.

Symptoms.—This form of disease is characterized by a succession of darting pains, which come on and pass away with the suddenness of an electric shock, shooting along the course of the affected nerve. "It comes on in sudden paroxysms, with longer or shorter intervals of more or less complete freedom from suffering. general, much pain is experienced throughout the whole course of the paroxysm, with frequent transitory shocks of darting pain, so extremely agonizing as often to cause a temporary loss of reason and consciousness." When this disease is seated about the head or face, the surrounding parts, during the paroxysms of pain, are extremely tender, and usually somewhat swollen; the slightest touch suddenly causing severe darting pain. "In very violent attacks of the disease, we generally find the neighboring muscles affected with spasms, and occasionally spasmodic twitchings occur in the muscles of parts distant from the place where the pain is located. When the disease occurs in the nerves of the face, the saliva is often secreted very copiously, and in nearly all instances of this kind, there is a profuse flow of tears from the eyes during the paroxysm."

It frequently happens in recent attacks of the disease, that the paroxysms come on at a particular hour of the day, preceded by coldness of the extremities, and sometimes chilliness; observing as much regularity with regard to the time of its coming on and passing away by perspiration, as regular intermitting fever or ague; the patient, during the intervals between the paroxysms, being quite free from pain.

Of its location.—Neuralgia is most apt to attack the nerves of the face and jaws; still, any portion of the nervous system is liable to be diseased in this way.

The optic nerve has occasionally been affected with neuralgia,

the pain being described by the patient, as severe as if a red hot needle were passed through the center of the eye.

The nerves of the extremities are liable to neuralgia, the parts becoming suddenly swollen and inflamed, and shifting about from one part to another, so that a part that is extremely painful, tender, and inflamed one day, may be entirely free from pain or soreness on the following one, another part having become affected. This form of disease is generally called flying rheumatism. It is of no importance in practice whether the disease be called neuralgia or rheumatism, except that in neuralgia mustard plasters or pepper ponltices should be applied to the spine; the constitutional treatment is to be conducted upon the same principles in both forms of disease. When the great sciatic nerve that passes through the hip, near the head of the thigh bone is affected, it is called sciatica, or sciatic pain.

Causes.—Neuralgia is in the majority of instances occasioned by taking cold, or from other causes by which the stomach and bowels are disordered. Frequently, however, it is produced by local causes, such as decayed teeth, wounds of the scalp, and injury of a nerve.

Case.—Mrs. R——, of Southwark, struck her forehead about the middle of the eyebrow, against the corner of a stone door. Shortly after the accident she was seized with violent pains in the part, and, shooting over that side of the head, it became swollen, and evidently larger than the opposite side. On taking cold, or when the system became disordered from any cause, the patient was apt to have violent paroxysms of darting pain in the side of the head, which was generally relieved by a sweat and emetic. The disease continued to return at intervals, during a period of two years. A singular circumstance connected with this case, was that the teeth of the upper jaw of the affected side, became entirely encased with tartar, excepting their crowns.

Case.—Miss ———, of New Jersey, had been subject to frequent attacks of neuralgia in one side of her face during a period of eighteen months, accompanied with loss of digestion and continued painful diarrhea. This patient experienced scarcely any benefit from medical treatment until she had some decayed teeth

extracted from the upper jaw of the affected side, upon which the pains ceased, and her general health was restored.

TREATMENT.—There are few cases of neuralgia in which the stomach and bowels are not prominently disordered in the first stages of the disease, requiring the employment of emetics to cleanse the stomach, and the use of stimulants and external warmth to promote perspiration.

OF THE VAPOR BATH.—Whether the disease be of recent occurrence, or of long continuance, the use of the vapor bath is particularly indicated. There are probably few physicians who have used the vapor bath extensively in neuralgia that have not sometimes found it to cure the disease after every other remedy had failed. In the treatment of neuralgia it is of the greatest importance to bring on perspiration, and favor its continuance by the application of external warmth, together with the use of pure stimulants internally.

After a vapor bath the affected parts should be anointed with the stimulating liniment, or other stimulating preparations: No. 6, or third preparation of lobelia.

EMETICS are peculiarly beneficial in all recent cases, and whenever the disease is occasioned by constitutional disorder. I have repeatedly observed immediate and complete relief afforded by the operation of an emetic.

Even when tic douloureux is produced by local causes, such as decayed teeth, or injuries of the head, emetics, especially when preceded by the vapor bath, will prove the most effectual, and sometimes the only means of relief.

Injections are beneficial when the disease is fixed about the head, accompanied with a determination of blood to the head, and coldness of the feet. Cases of this kind may, very generally be relieved by placing the feet in warm water, and employing a stimulating injection to relieve the bowels, followed by one composed of lobelia powder and warm water, and retained with a view to relax the system, and equalize the circulation.

STIMULANTS.—When the attack is violent and protracted, besides the use of emetics, and the vapor bath, the patient should take freely of capsicum or composition, together with broken doses of lobelia.

Compound Lobella Pills.—When the disease has become deeply seated, requiring a long course of treatment, the above pills may be substituted for other stimulants, and the No. 3 pills may be used as anti-canker medicine.

Charcoal.—A superabundance of acid in the stomach commonly attends neuralgia, for which I have found the purified charcoal a valuable remedy. It may be prepared in composition or spice bitter tea, and taken three or four times a day. The charcoal is more particularly adapted to chronic cases of neuralgia, attended with acidity of the stomach, and costive bowels.

When the disease occurs periodically, like ordinary ague, the patient being free from pain during the interval between the paroxysms, the case should be treated precisely as a case of intermitting fever or ague: first by cleansing the stomach, and using freely of pure stimulants until the tongue begins to clean, and the secretions of the skin and mucous membrane are restored; and then by giving freely of tonics, of which Peruvian bark or quinine are the most efficient.

In neuralgia of the extremities, usually termed flying rheumatism, besides the constitutional treatment already described, benefit may be derived by stimulating applications along the course of the spine, stimulating liniment, mustard plasters, or pepper poultices.

For "ague in the face," which is only another name for neuralgia, Dr. Thomson recommends a portion of cayenne pepper wrapped in gauze or book muslin wet with No. 6, and applied between the cheek and the jaw of the affected side. This will cause the secretions to flow freely, and relieve the pain. I attended an old lady in Southwark, who had a severe attack of neuralgia in the lower jaw, who experienced relief by keeping a portion of the liquid of the third preparation of lobelia in the mouth. The greatest benefit, however, was derived from the use of stimulating injections containing a portion of lobelia, together with the vapor bath, and by the system being kept slightly relaxed by broken doses of lobelia.

When neuralgia is brought on by decayed teeth, they must be removed before a permanent cure can be looked for. It is not a

proper time to extract teeth during a paroxysm of pain, more especially if the jaw should be swollen and inflamed.

In sciatica, (neuralgia in the hip,) besides the "course of medicine," and general constitutional treatment already described, benefit may be obtained by the internal use of the oil of turpentine. A teaspoonful may be taken three times a day before meals. It may be taken mixed with a small portion of honey, or rubbed up with a teaspoonful of sugar, and then adding a little water.

NEURALGIA OF THE STOMACH is characterized by severe pain at the pit of the stomach, which often darts into the breast and to the spine, and is "rather relieved than aggravated by pressure." The pain is often relieved by taking a full meal, or a draught of stimulating drink. The tongue is covered with a white fur; the appetite variable, sometimes natural, at others craving, and then again extremely indifferent. There is an abundant flow of saliva; absence of thirst, and often a repugnance to liquids. The pain which is relieved by eating, is apt to return a few hours after meals, accompanied with a feeling of weight at the stomach; harassing belchings, and extreme depression of mind. In severe cases "the patient sometimes experiences difficulty of breathing, palpitations of the heart, wandering pains and peculiar sensations of coldness, especially in the arms, loins, and lower extremities. The sleep is sometimes good, sometimes agitated, and sometimes the patient is unable to sleep at all; yet, in the morning the patient gets up refreshed, and feels quite well, till breakfast renews the suffering.

Many of the symptoms attending neuralgia of the stomach, are such as frequently accompany ordinary dyspepsia, so that it may be difficult to determine whether the disease be ordinary dyspepsia or neuralgia. The same general plan of treatment, however, will be suited to each form of disease, varying the remedies to suit the emergency of the case. When the symptoms are very distressing, a course of medicine will be proper, more especially when the distress comes on after meals. A teaspoonful of the tincture of lobelia, taken in a tablespoonful of warm water, or mint tea, will seldom fail of relieving neuralgic pains in the stomach. It may be necessary, however, to repeat the dose. "I have myself,"

says Dr. Eberle, "suffered much from this complaint, (neuralgia of the stomach,) and have taken opium in large doses; but I have found another remedy, which is less ruinous in its consequences, and far more permanent in its good effects, than this narcotic. This remedy is the saturated tincture of lobelia inflata; a few tablespoonsful of which has never failed to give me speedy relief, and to procure me long intervals of exemption from the disease. I have also," says the doctor, "used it in the case of a gentleman in this city, with the happiest effect, but further than this my experience in the use of this article does not go."

STIMULATING LINIMENTS, and various volatile lotions, may be applied externally with much advantage in cases of neuralgia.

# DROPSY.

### SECTION LXVI.

Dropsy is an unnatural accumulation of fluid in one or more of the cavities of the body, or in the cellular tissue, interposed between the skin and flesh.

CLASSIFICATION OF DROPSY.—1. AscITIS.—When the fluid is collected in the cavity of the abdomen.

- 2. Hydrothorax.—When the effusion takes place in the cavity of the chest.
  - 3. Anasarca.—Dropsy in the cellular tissue.

In many instances dropsical effusions take place in various parts of the body at the same time. Thus in some patients there are ascetis, hydrothorax, and anasarca, all at once.

General Causes of Dropsy.—These are "obstructions to the flow of venous blood," arising from disease of the liver, heart, or lungs; excessive loss of blood; disease of the kidneys; debility, especially after scarlet fever and measles; chronic diarrhea; the use of arsenic; purging with drastic cathartics; or the abuse of

mercury. In marshy districts of country dropsy often succeeds imperfectly cured ague. Exposure to wet and cold frequently causes dropsy in those predisposed to this form of disease.

In a great majority of cases dropsy comes on gradually; yet, in some instances the dropsical condition has been experienced very suddenly. Professor Chapman mentions the case of a gentleman from Virginia, who, by plunging into a cold bath, the body being at the same time greatly fatigued and in a free perspiration from severe exercise, brought on a dropsical effusion in a few hours after. Another gentleman from South Carolina went into a very hot water bath, after a fatiguing ride on horseback one very hot day, and was also taken suddenly with dropsy. In another instance dropsy was suddenly produced by a person lying down on the ice, who was much fatigued by skating. He was seized with cold, which was followed in a few days by dropsy.

THE GENERAL SYMPTOMS OF CONSTITUTIONAL DISORDER attending dropsy are, languor and lassitude; paleness of countenance; a dry and husky skin, without any tendency to perspiration; general coldness and torpor of the system; scanty and high-colored urine; constipation of the bowels, or the stools of an unnatural appearance; and the appetite variable, yet generally impaired.

Dropsy is the effect of an obstruction in some important organ, or of general debility and derangement throughout the system.

1. Ascitis—Dropsy in the cavity of the Abdomen.—Dropsy in the cavity of the abdomen is generally associated with an extensively discased liver or spleen, occasioned, in most instances, either by drunkenness, long continued agues, or inveterate dyspepsia. Dropsy, however, being the effect of previous disease and debility, may therefore be produced by almost any debilitating influence, such as cold and dampness, a sudden check to perspiration, confinement in foul air, or the use of unwholesome food.

Pregnancy, and tumors in the cavity of the abdomen, have, in some instances, been mistaken for dropsy. A collection of water in the cavity of the belly, however, may be very readily distinguished from a tumor, or from pregnancy. One of the surest means for ascertaining the presence of water, is by placing the palm of the hand on one side of the belly, and with the other

hand to tap lightly on the opposite side, which will cause a distinct fluctuation or wave to be felt by the hand placed on the abdomen, provided there be a collection of fluid within. In dropsy the swelling is uniform on both sides of the abdomen, and when the patient lies on the back, the liquids will press out the sides and flatten the middle; whereas, in pregnancy or tumors, there is usually more swelling in one side, and the form of the swelling is but slightly altered by lying on the back. A collection of water in the cavity of the abdomen will occasion difficulty of breathing, from the pressure of the fluid upon the diaphragm, when the patient lies down with the hips raised higher than the chest. Dropsy is attended with symptoms of constitutional disorder, which are mostly absent in pregnancy.

Dropsy of the abdomen has been cured in many instances by the Thomsonian practice, when other plans of treatment have

failed.

2. Hydrothorax—Dropsy in the Chest.—Dropsy in the chest, like other forms of dropsy, is the consequence of a disordered condition of the general system, or arises from obstruction in some important organ. In this form of dropsy patients seldom experience much inconvenience from it, until the accumulation of water becomes so great as to interfere with respiration. The dropsy may take place only in one side of the chest, yet more commonly the effusion occurs in both sides.

DISTINGUISHING SYMPTOMS.—These are, a dull sound produced by percussion, (tapping on the chest with the ends of the fingers,) whilst the patient is in a sitting posture. Great difficulty of breathing produced by pressing firmly upon the abdomen, just below the ribs, which, by forcing up the diaphragm, causes the water to rise in the chest, and thus it interferes with respiration. A sense of suffocation on lying down; "starting during sleep;" great agitation; and an habitual cough.

The symptoms above mentioned, however, may attend other forms of disease, without there being an accumulation of water in the chest. Thus asthma and disease of the heart may occasion the same oppression of breathing that occurs in dropsy of the chest. The same difficulty of lying down attends asthma as in

dropsy of the chest. Asthma, however, usually comes on by paroxysms, whereas in dropsy of the chest the oppression of breathing and inability to lie with the breast low continues without intermission. If, together with the symptoms before mentioned, characterizing dropsy of the chest, there be a tendency to dropsy in other parts, as in the feet, and beneath the skin covering the chest, sufficient evidence will be afforded to warrant the conclusion that there is water in the chest; and although it may be difficult to determine whether the disease be dropsy, asthma, or disease of the heart, it should occasion no embarrassment to the practitioner in directing the treatment, for the same general plan of treatment will be equally appropriate to each case. Thus the vapor bath which will relieve asthma, will prove beneficial in dropsy, wherever it may be located. Lobelia, which is the most effectual remedy for asthma, is the article chiefly to be relied upon. both in dropsy of the chest, and disease of the heart.

In dropsy of the cliest or abdomen, a sudden subsidence of the swelling in the legs and feet, without an increased secretion of urine, is an unfavorable symptom, as in most instances the patient dies soon after this occurs, and sometimes very suddenly.

3. Anasarca—Cellular Dropsy.—This form of dropsy generally commences in the feet, and the swelling ascends, and in some cases extends over the whole surface of the body. Sometimes the swelling will be confined to the legs and feet, or to the face, hands, and feet.

Pressing a finger firmly against the swelling, will leave an indentation or pit, which will remain a considerable length of time after the pressure has been removed. This serves to distinguish cellular dropsy from swellings arising from other causes. Thus milk-swelling, as it is termed, has the appearance of drosy, but pressing a finger upon it, will not leave such indentations as remain after pressure upon dropsical swellings.

General Causes.—Cellular dropsy is peculiarly liable to occur from exposure to cold after scarlet fever and measles. Females are liable to dropsy of the lower limbs during the later period of pregnancy, in consequence of pressure upon the veins, thus obstructing the circulation. Extreme exhaustion from loss of blood; "exposure to cold when the system is under the influence

of mercury, the long continued use of arsenic;" chronic diarrhœa, "repelled cutaneous eruptions, great debility and exhaustion, chronic gout, organic disease of the kidneys, &c., are the most common causes of this variety of dropsy.

Dropsy of the cellular tissue is more readily cured than dropsy of the chest or abdomen. More especially is it less difficult of cure when it comes on suddenly, and is accompanied by fever, and considerable activity of pulse, without great prostration of strength. But when it comes on very gradually, attended with coldness, and extreme torpor of the system, or when it depends upon extensive derangement of important functions, as those of the stomach, liver, kidneys, or spleen, the cure is mostly very difficult. Still more difficult is it when connected with dropsy of the abdomen or chest, constituting general dropsy.

TREATMENT OF DROPSY IN GENERAL.—The most important indication for the cure of dropsy, is to correct the disordered condition that causes it.

An occasional course of medicine is the most effectual means to restore a healthy action throughout the system, and it will be required in most cases of dropsy. As a general rule the course should be repeated more frequently in the early stage of dropsy than when it has been of long standing.

Of the course of medicine.—1. The vapor bath.—This fulfils important indications in the treatment of dropsy. It improves the condition of the skin, effects a determination to the surface, excites free perspiration, diffuses a natural warmth through the system, and by augmenting sensibility, causes the emetic to operate more effectually. It is an observation of Dr. Thomson's, that one emetic after steaming will prove as effectual in removing disease, as four emetics given without the bath. A vapor bath in the evening will enable a patient to rest more comfortably through the night. Dropsical swellings of the limbs that occur after scarlet fever and measles, may be effectually removed in many instances by the use of vapor baths, together with giving a dose of composition powder three or four times a day.

2. The emetic.—The most decided benefit is derived from the frequent administration of emetics, more especially in the early

period of dropsy. Cases of dropsy have been cured by spontaneous vomiting. Dr. Eberle mentions a case of dropsy of the abdomen cured by spontaneous protracted vomiting. The relaxation produced by the lobelia, together with the retching and straining effort to vomit, will, in some instances, overcome obstructions in the liver and other organs. In general dropsy, when the internal heat, or constitutional energies are greatly exhausted, and the disease is of long continuance, emetics will be of little use, except as a means of affording relief when there is great oppression at the pit of the stomach. When patients are very low, the emetic should be made of the liquid of the third preparation of lobelia in strong bayberry tea, or infuse the lobelia powder in the bayberry tea, and add two or three teaspoonsful of No. 6 to each dose of the emetic. In the earlier period of the disease, and more particularly if fever exist, the system should be relaxed by a free use of the lobelia. An injection of lobelia powder in luke-warm water, retained, will assist in relieving the system, and will also favor the operation of the emetic. Patients sometimes experience much distress during the operation of an emetic, in deeply seated complaints, but realize great benefit after the operation, from its effect.

3d. Injections.—If the bowels be costive, an injection should be administered previously to the bath. Stimulating injections, containing a portion of lobelia, exert a beneficial influence, by arousing the nervous energy, and thus give an additional impulse to the circulation of the blood, and an increased action to the absorbent vessels. The kidneys may also be stimulated to increased action by injections. To favor the operation of the medicine, the patient must be kept warm, and take freely of capsicum, or composition tea.

4th. A Vapor Bath, after the emetic, completes the course of medicine. The patient should be allowed to remain in bed after the operation of the emetic, as long as he continues in a perspiration. When perspiration ceases, the second bath may be applied; and the patient showered with cold water, or washed with spirits, rubbed dry, and the surface bathed with some stimulant, such as No. 6, pepper sauce, or stimulating liniment. After this the patient must be kept warm, either in bed or by being warmly

clad, and continue the use of stimulating medicines, to support the internal heat," and maintain a determination to the surface. Where perspiration cannot be continued, or an increase in the secretion of urine be induced, the use of the usual stimulants, capsicum or composition tea will be required. The medicine must be given chiefly in the form of pills, or the powders taken dry, or in a very small quantity of water. The compound lobelia pills answers both as a stimulant and relaxant, and they should be taken in sufficient quantity to occasion a slight and continued nausea.

NERVINES.—Scull cap or valerian tea, may be used at night to promote sleep, or the nervine may be taken with other medicine.

Directics.—In certain conditions of the system, the use of directic medicines will be beneficial, by increasing the secretion of urine. An increased flow of which is among the first symptoms indicating a favorable termination of dropsy. But where the loss of power in the kidneys depends upon a great degree of constitutional derangement, it will be useless to rely upon directics to cure the dropsy. First resort to general constitutional treatment, and as the health improves, directics will be beneficial. A great variety of directics are employed in the treatment of dropsy. The following, I am informed, was a favorite remedy with the late Dr. Parrish.

Take parsley root, English mustard seed, horse radish, and burdock root, grated fine; put them into a stone jug with a proper portion of sound cider. To be taken several times a day. If this should increase the flow of urine without occasioning unpleasant feelings in the stomach, it should be continued as long as it is found to be agreeable.

A strong tea of the *sumac*, more especially of the *roots* and *berries*, answers in some instances as a *diuretic*, besides the important indication which it fulfils of cleansing the stomach and bowels of "canker."

OIL OF JUNIPER.—The diuretic effect of *Holland gin* depends upon the oil of juniper contained in it. Juniper oil is one of the best of diuretics, and may be used with advantage in many cases of dropsy. The dose of the oil is from five to fifteen or even

thirty drops, rolled up with a teaspoonful of slippery elm powder and sugar, adding a little water before taking. To be repeated three or four times a day.

Whilst taking diuretics, the vapor bath may be occasionally administered, and the patient must take freely of the compound lobelia pills, or capsicum tea.

In most cases of dropsy of the belly, it becomes necessary to drain off the water by tapping. This, though a very easy and safe operation, requires to be done by one acquainted with the operation. I shall, therefore, not attempt to give directions for performing it, but merely observe, that I have found a thumb lancet the best instrument for tapping in dropsy; a canula closed at the end and perforated with holes to admit the escape of the fluid, is to be inserted when the lancet is withdrawn. With a lancet in good order, the operation of tapping does not occasion more pain to the patient than is caused by bleeding in the arm. The trochar (the instrument generally employed for tapping,) has no advantage whatever over the lancet, and with the latter the operation can be performed with much less difficulty, and with one-tenth of the pain to the patient that would be caused by the introduction of the trochar. In some instances the operation of tapping requires to be several times repeated. There are cases recorded where the operation has been performed more than one hundred times in the same patient. Even in cases where there is no probability of a cure being effected, the operation of tapping will frequently be called for as the only means of relief to the patient.

Tonics.—When the disease has been of long standing, the stronger kinds of tonics should be used, more especially after a few courses of medicine have been administered. A strong tea of quassia, wormwood, balmony, or golden seal, may be taken once or twice a day, together with the pills before mentioned.

EXTERNAL APPLICATION.—Bandaging the swollen parts, more especially the legs and abdomen will be beneficial; and after tapping the use of a bandage becomes indispensible. Before applying the bandage, the stimulating liniment, No. 6, or pepper sauce must be applied to the skin; or the bandage must be wet with

strong salt water, and dried before it be applied. Frictions of the surface with a salted towel or flesh brush will be of more or less benefit.

ELATERIUM, OR THE SQUIRTING CUCUMBER, is a remedy generally employed in the treatment of dropsy by physicians of the old school. It is a powerful cathartic, acting with great violence upon the stomach and bowels, often exciting inflammation, and sometimes occasioning death. The elaterium will sometimes remove the water, but the injury which it does to the digestive organs, will more than counterbalance the benefit derived from the reduction of the dropsy. Dropsical affections removed in this way are almost sure to return, except when the effusion is confined to the lower extremities, and which might have been removed by vapor baths and the use of composition. And when dropsy returns, after having been removed by the use of elaterium, or other hydrogogue cathartic, the digestive powers being prostrated by the cathartic, will increase the difficulty of permanently effecting a cure.

Dr. Thomson, in his narrative, makes mention of several cases of dropsy, in which he succeeded in effecting a cure, after the regular practice had failed, and the disease had been considered as incurable. He treated them upon his general plan of giving freely of the "hot medicine, to support internal heat, and to continue perspiration, assisted by external warmth, and occasionally by a course of medicine. And in dropsy of the abdomen, he drew off the water by tapping, in the usual way, after passing the patient through several courses of medicine, in order to restore a more healthy action in the system, and thus lessen the liability to a return of the dropsy.

The character of the fluid drawn off by tapping, varies in different cases; sometimes it will be high colored like strong coffee, or it may be thick and ropy; more frequently, however, it resembles ordinary urine.

Hydrocele, or dropsy of the scrotum.—When this occurs in infants, as it sometimes does at birth, it is called *congenital hydrocele*. It may be distinguished from hernia, by the transparency of the parts, and the absence of slight vermicular motions.

It is generally readily cured in infants and children, by applying some mild stimulant, the scrotum being kept in a suspensary bag, by which moderate pressure upon the parts is maintained.

Hydrocle in adults, frequently demands the operation of tapping the scrotum. From a tendency to a reaccumulation of the water, the operation will require to be repeated many times, in some cases, before a cure takes place. The late Dr. Physic relied almost exclusively on tapping for the cure of hydrocle, repeating the operation until the water ceased to accumulate.

Hydrocephalus—Dropsy in the Brain.—Effusion of water in the brain rarely occurs except in children, between two and five years of age.

Symptoms.—Pain in the head, especially across the brows, or in the back of the neck; constant motion of one or both hands; sickness and efforts to vomit; a disposition to be in a lying posture; a deranged condition of the bowels; an eruption on the face, resembling very minute drops of water; stupor and convulsions, attend dropsy of the brain.

The above symptoms usually accompany hydrocephalus. Precisely the same group of symptoms occur, however, without there being any effusion of water on the brain. Dr. Chapman recently attended in consultation on a case, where there was every characteristic symptom of dropsy of the brain, but on examination after death, there was no appearance of water in that organ.

Causes.—An originally feeble constitution; exhaustion from disease; exposure to wet and cold; together with the reducing plan of treatment practised by the medical profession, constitute the principal source of dropsy of the brain. Severe attacks of diarrhæa or infantile cholera, are frequently attended with effusion of water in the brain; the dropsy being merely a *link* in the chain of effects resulting from loss of vital power. Active purging, when the system is in a state of exhaustion, may occasion symptoms indicative of hydrocephalus.

Dr. Travers, who in reputation is excelled by few in the profession, advances the opinion, that the depletive treatment pursued by the profession occasions, in many instances, those symptoms indicative of dropsy in the brain, which so frequently are found in children.

A physician discovers symptoms of inflammation in the head, and adopts a depletive course of treatment under the false impression that the inflammation is the source of danger. A child is taken, for instance, with cholera morbus, and the purging and vomiting continuing for some time, the brain consequently becomes exhausted, and nature sets up her restorative action, occasioning symptoms of inflammation of the brain: this feverish or inflammatory action is the means which nature employs to restore the lost vitality of the brain, and to sustain its functions, and these curative efforts should be aided instead of being prostrated by a depletive course of treatment. Where the pulse is strong, and the skin hot, the chances of a cure are much greater than when there is general torpor and a cold skin.

TREATMENT.—The existence of dropsy in the brain cannot be determined to a certainty, as the symptoms which attend collections of water in the brain also accompany an inflammatory action in it. Precisely the same symptons also arise from determinations of blood to the head from exhaustion of strength. The treatment, however, applicable to one case, will be equally suited to a similar condition of the general system in the other. The treatment must be directed to assist the efforts of nature. The means to be employed are injections, the vapor bath, emetics, the warm foot bath, volatile stimulants applied to the head, whiskey or vinegar, together with frequent doses of stimulants, which may be rendered more efficacious by the addition of small portions of lobelia.

Sometimes an oppressed stomach will occasion symptoms resembling those arising from inflammation of the brain, and be entirely relieved by the operation of an emetic. Even though there should not be foul matter burthening the stomach, still a lobelia emetic may prove beneficial, more especially if there be fever.

Where there is an active determination of blood to the brain, accompanied by fever, the system must be kept under the influence of lobelia in broken doses, taken into the stomach, or administered by injection to the bowels. For although an inflammatory action be necessary to the lost vitality of the brain, still there may sig. oo.

be an undue determination of blood, and concentration of nervous influence to the head, which may require to be regulated by the means above mentioned, together with the use of the vapor bath, foot bath, pepper poultices or mustard plasters to the feet, and cooling applications to the head. The strength is to be supported by the use of the stimulants usually employed, and by a light nourishing diet. In fine, inflammation, dropsy, and all other disorders of the brain, arising from constitutional disease, are to be treated upon the same general principles.

Symptoms denoting a recovery.—A heavy sediment in the urine, or if it have a feetid smell, the pulse softening, and a running from the nose. This last, denoting the restoration of the secretions of the nose, is to be depended upon more than any other symptom, as indicative of a recovery.

BAD SYMPTOMS.—Blindness or deafness, deep stupor, spasms, a copious discharge of pale urine, watery discharge from the bowels, and twitchings of the muscles are symptoms which indicate an unfavorable termination of the case.

## SCROFULA.

### SECTION LXVII.

The name scrofula is applied to forms of disease differing materially in their general aspect. Thus, a child afflicted with sore eyes is said to be scrofulous; another has an eruption on the skin which is called scrofula; a third will have a disease in the hip, which receives the name of scrofula; whilst a fourth has swellings in the glands of the neck, also called scrofula. These are forms of disease which are apt to occur in persons of delicate and feeble constitutions, generally termed scrofulous.

Children possessing what is called the scrofulous constitution are usually of small frame, with pale and delicate skin; the mus-

eles imperfectly developed, the flesh being soft and flexid, with light hair, blue or grey eyes, long eye lashes and large upper lip. The head (particularly the posterior part) is usually large, and the temples flattened or somewhat depressed. There is, in general, a great proneness to slight catarrhal affections during which the wings of the nose and the upper lip are apt to become swollen. The edges of the eye lids are much disposed to become inflamed, and when the scrofulous tendency is strongly developed, the tarsi (under edge of the eye lids) "are constantly red and tender." The digestive powers are feeble, the appetite variable, and the bowels seldom in a healthy condition. The patient is very sensitive to cold, and his temper generally irritable. The intellectual powers are usually very strong.

In female children of scrofulous constitution, "a leucorrhæl discharge is apt to occur from time to time; and in very young children, excoriations behind the ears, scaly eruptions about the

head, and lips," and sore eyes are frequently observed.

It very often happens that children exhibit a strong tendency to scrofula, but become healthy without the disease having ever become further developed, except occasionally by slight swellings in the glands about the neck. Sometimes the disease breaks out early in life, and in others it does not appear until after the age of puberty. In some the disease is of short duration, the patient soon becoming entirely healthy; in others the constitution sinks under the ravages of the disease, and the case terminates fatally, most commonly by tubercular consumption. Occasionally the disease breaks out in childhood, and continues for years, or even during a long life, the patient enjoying tolerably good health with the exception of swelling of the glands about the neck, and probably more or less discharge of matter from those that have suppurated; or if the disease be located in the hip, the patient may recover, except from the lameness and deformity which almost always follows as a consequence of the hip disease.

Causes.—Although scrofula is far more likely to occur in children of a peculiar delicacy of constitution, still it is occasionally observed in those who have inherited sound constitutions. The disease essentially consists in debility and obstruction in the

glands; and the same cause, for instance, exposure to cold, producing obstructions in the glands of one of a scrofulous constitution, may, by frequent repetition, together with unwholesome diet and confinement in close apartments occasion the disease in one of a naturally good constitution.

Children are especially liable to slight swelling of the glands under the jaw and on the neck, during teething, and when they have eruptions behind the ears or on the head. Arising from such causes, these slight enlargements of the glands almost always pass away without any attending serious consequences.

"A cold, humid, and variable atmosphere, more especially when aided by deficient nourishment, appears to have a strong tendency to favor the development of the scrofulous habit." Children who work in the large cotton and woolen manufactories of England are peculiarly liable to scrofula. The disease also prevails among the children of the poor, when they are badly clothed, sleep in small close rooms, and who live on unwholesome food, badly cooked.

Scrofula frequently occurs as a consequence of taking cold after measles, scarlet fever, or whooping cough.

Preventives.—With children who exhibit marks of a constitutional tendency to scrofula, a small frame, pale skin, soft and flaccid condition of the flesh, light fine and thin hair, long and slender neck, with a weak and irregular appetite, an unhealthy condition of the bowels, and a tendency to eruptions about the head, or to swelling in the glands of the neck, means should be employed to renovate and strengthen the constitution, in order to prevent the development of scrofula. Regular exercise in the open air, warm clothing, sleeping in a large room, wholesome, nourishing food, shower baths, or bathing in cold salt water in the morning, and friction to the surface, are the means chiefly to be relied upon, not only for renovating the constitution and preventing the development of scrofula, but they are also important auxiliaries in the cure of the disease after it has become manifest.

TREATMENT OF SCROFULOUS TUMORS, COMMONLY CALLED KING'S EVIL.—When the glands about the neck become swollen, and hard, but not inflamed, the tumor should be rubbed gently fifteen min-

utes, or half an hour, every morning and evening, and a poultice of flour or slippery elm powder wet with salt water applied. The poultice to be kept on night and day, and occasionally wet with salt water. If the appetite be variable, or the bowels are in an unhealthy condition, an emetic or full course of medicine will be of signal benefit in aiding to diminish or scatter the swelling of the glands. The course of medicine must be repeated whenever the condition of the patient appears to require it.

Compound Lobelia Pills.—One or two of the compound lobelia pills after meals, and at bed time, will be useful, by correcting the secretions of the stomach and bowels, and preventing costiveness.

Toxics are proper in every stage of scrofula, when the patient is languid and weak. The spice bitters, gentian, Virginia snake root, quinine, or garden bitters, may be employed, occasionally changing them, as the fancy of the patient, or the judgment of others may determine.

THE DIET must be nourishing and easy of digestion. Boiled milk and toast, eggs, custards, mutton, the tender part of fresh beef, all kinds of wild game, stale bread and butter, potatoes, and boiled rice, are suitable articles of diet in scrofula.

Fresh air, moderate exercise, cleanliness, salt water baths, frictions to the surface with a flesh brush, or salted towel, are of as much importance in the cure of scrofula as medical treatment. Close and crowded school rooms, are improper places for children predisposed to scrofula. It is equally important for such children to avoid getting their feet damp. It is not sufficient to wear merely tight shoes, but the soles should be very thick, to prevent dampness from penetrating them. It is of little avail, as a preventive to disease, to clothe the body warm, whilst the feet are unprotected from cold and dampness.

When a Scrofulous tumor becomes painful and inflamed, warm emollient poultices must be applied with a view to favor suppuration, and prevent its being converted into an indolent ulcer. Elm, pounded cracker, white pond lilly and ginger combined together, and wet with warm water, will form a suitable poultice. The poultice may require to be wet occasionally with

warm water, to prevent its being hard and dry. If the disease be accompanied by high fever and severe pain, a course of medicine will be required, together with the use of broken doses of lobelia, and once or twice a day a teacup half full of strong bayberry tea, or four or five of the No. 3 pills. If the tumor have been inflamed, throbbing, and at the same time the patient affected with chilliness, followed by fever, and after the lapse of some days or probably a week or more, the tumor becomes soft and fluctuates under the fingers, and a blush of red is observed on the skin, the tumor may be opened and the same stimulating poultice applied as long as the abscess discharges; after which some kind of salve or plaster must be applied to ptoteet the part from the influence of the air. Abseesses along the lower jaw, must always be opened from inside the mouth.

Of the Indolent Abscess.—It sometimes happens that a scrofulous tumor, after being more or less inflamed for a time becomes soft, and exhibits positive signs of its containing pus, but there will be no pain in the part, and the skin over the tumor will be cool, the patient elear of fever, and the system in a torpid condition. This condition of things arises as a consequence of the eonstitutional strength being too weak to raise or eontinue the proper degree of inflammation sufficient to earry on healthy suppuration. The efforts of nature subside without accomplishing its design, and the abscess becomes converted into one of an indolent character, which should not be opened, but stimulating liniments or strengthening plasters applied to the tumor, and the constitutional energies restored by the use of tonies, the vapor bath, and shower bath; a course of medicine every few weeks to cleanse the stomach and bowels; and a cold salt water shower bath in the morning, provided the patient does not remain ehilly after it. If a glow of warmth comes on in the course of fifteen minutes or half an hour after the bath, it will certainly be beneficial. These means, together with fresh air and wholesome food, may succeed in eausing the absorption of the contents of the abscess; or if it should break, or require to be opened, the constitutional efforts will be better able to carry on the healing process. In all eases where a large abscess is either forming, or has discharged its contents, the most nourishing diet must be allowed the patient to supply the system with strength to carry on her healing operations. In case of cold or indolent abscess, wine whey forms a suitable article of diet when the stomach is too weak to take much solid food. Under circumstances of this kind bitters must also be used freely.

A Scrofilous Ulcer is to be known "by its occurring after a suppurated scrofulous tumor—the peculiar dull red, or purple color of its edges—its remaining indolent for a length of time, neither increasing nor diminishing in size, and its being attended with that peculiar state of health which invariably prevails in the scrofulous constitution."

TREATMENT OF SCROFULOUS ULCERS.—Constitutional treatment is more important than local applications in the cure of this kind of ulcer. The means above mentioned for cleansing the stomach and bowels, and for improving the health, will be especially adapted to this form or stage of scrofula. Stimulating poultices must be applied to the ulcer, containing a large portion of astringent—either white pond lilly, or bayberry, and the poultice wet with a strong tea of the same.

Indolent ulcers may be stimulated to a more healthy condition by filling them with dry, and finely pulverized marsh rosemary, bayberry, or rhattany root, and then apply a poultice or salve over the whole, repeating it morning and evening.

"We have known a sea voyage to heal scrofulous ulcers of bad character which had resisted years of medical treatment."—Mar shall Hall.

When a scrofulous abscess, after being evacuated, continues to discharge more or less for a great length of time, it should be syringed with castile soap and water, and in order to stimulate a more healthy action of the parts, inject into the cavity weak ginger tea, or a tea made from the inner bark of a young chestnut tree, repeating it every day, and apply over the surface a stimulating poultice, or strengthening plaster covered with pepper.

SARSAPARILLA.—A simple syrup of sarsaparilla, when properly prepared, may be used with decided benefit in scrofula more especially when the disease has been of long continuance, and the pa-

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tient feeble and emaciated. I have, in some instances, observed a rapid improvement in patients on taking a syrup of sarsaparilla. The cases in which I have known the most benefit derived from using the syrup, have been patients in whom the disease had apparently become exhausted, and the system left in a languid, impoverished condition. It is questionable whether more benefit is not derived from the sugar of which the syrup is composed, than from the sarsaparilla. On many occasions I have become acquainted with cases of scrofula in which patients have taken from twenty to sixty bottles of Swaim's and other preparations of sarsaparilla without experiencing any benefit from them. Most of the cases of remarkable cures effected by Swaim's Panacea, have been of the character above alluded to—the disease having come to a stop, and the system being in a condition in which a syrup of sugar afforded the most appropriate kind of nourishment to the system, that by its use new blood was made more rapidly, furnishing to the system that nourishment which it required in order to regain strength and flesh.

## GOITRE.

### SECTION LXVIII.

This form of disease, although resembling scrofulous swelling of the glands, is essentially different from scrofula.

GOTTRE is an enlargement of the thyroid gland, situated low on the front part of the neck, and covering a portion of the windpipe. Scrofula is seated in the lymphatic glands, which occupy a different position from the former. The thyroid gland possesses a low degree of vitality, and its use has never been ascertained. The lymphatic glands have a higher degree of vitality, and they are known to perform important functions. This difference of

character between the *thyroid* and *lymphatic* glands affords an explanation of the cause of the difference between *goitre* and *scrofula*.

In the first stages of goitre, the tumor is soft and spongy to the touch—the skin covering it has a natural appearance, "and is moveable over the enlarged gland." As the disease progresses, the tumor becomes harder, and after the lapse of many years, it sometimes becomes very large, and of a gristly or cartilaginous structure. The usual progress of goitre is very slow, requiring many years before the tumor acquires much size, and, in many instances, it never becomes so large as to occasion great inconvenience to the patient. In some, however, the tumor occupies almost the whole of one side of the neck, extending from the clavicle (collar bone) to the ear. Goitre is very seldom attended with pain or inflammation, and in these particulars, it differs materially from scrofula in general; yet sometimes goitre is attended with darting pains, when the tumor is very large and indurated.

The skin and cellular tissue covering the thyroid gland, yielding readily to pressure, admit the gland to become very large, without pressing upon the windpipe to such a degree as to interfere with respiration. When the gland becomes greatly enlarged and hard, it generally occasions some embarrassment in breathing, swallowing and speaking.

Goitre prevails epidemically among the inhabitants of valleys situated at the base of high mountains. "In no part of the world is the disease so prevalent, and so distressing in its character, as in some of the valleys of the Alps and Appenines. In certain districts of Switzerland and Savoy, almost the whole of the indigenous population are more or less affected with goitrous enlargements. In the valley of the Rhone, at Martigny, St. Maurice, Aigle, Villeneune, Bourg, Lucerne, and at Dresden, and in the vallies of Piedmont, this disease is extremely common."—

\*\*Eberle\*\*

Some experienced surgeons have mistaken goitre for aneurism of the carotid artery. It has likewise been mistaken for an enlargement of the jugular vein. When only a portion of the gland becomes enlarged, and remains soft, it may be difficult for even sig. FF.

an experienced surgeon to determine whether the disease be aneurism, enlargement of the jugular vein, or goitre.

Causes — Great diversity of opinion prevails among medical men in relation to the eause of this singular disease. Whilst some suppose it to be brought on by drinking water impregnated with lime, and other ealearious substances, others have advanced the opinion that the use of snow water is the eause of the disease. Others have contended that goitre is produced by the use of water entirely devoid of carbonic acid; and others again have conceived it to depend upon particular articles of food. A more plausible theory of the origin of the disease, is that which attributes it to atmospheric influences-a humid, dense atmosphere, and the absence of electricity in the air. "In many deep, damp, and woody valleys, goitre is extremely prevalent; but in proportion as we ascend towards the more elevated and dry situations, on the sides and tops of the adjacent mountains, the disease becomes less and less frequent. It is well known, moreover, that when young persons affected with goitre remove from the valley in which the disease was contracted, to high and dry situations, the tumor almost always becomes considerably diminished in size, and in many instances disappears altogether."-Edinburg Med. and Surg. Journal.

Not Dangerous.—Goitre is not a dangerous form of disease, being very rarely known to prove fatal, except in those situations where it prevails as an epidemic.

TREATMENT.—This disease is evidently an obstruction in the gland, and is to be eured only by removing this obstruction. The means to be employed for restoring the circulation in the obstructed gland, are frictions with flannel, or with the warm hand; and the use of stimulating liniments and warm fomentations. The application of the vapor and shower bath, and occasionally a full course of medicine, are important, more especially in the earlier stages of the disease, whilst the tumor remains soft.

Patients residing in a district where goitre prevails epidemically, will derive more benefit by a removal to a more elevated situation, where the disease does not prevail, than from any medical treatment. Washing the tumor with salt water, and sea bathing, are said to be beneficial in removing goitre, more especially in its earlier stages, before the tumor becomes of a cartilaginous or gristly texture.

Iodine, in the form of ointment, applied to the tumor externally, is considered by some as an effectual remedy for dispersing the tumor.

### SUSPENSION OF ANIMATION FROM DROWNING.

#### SECTION LXIX.

When a person is taken out of the water soon after drowning, "the face exhibits a turgid and livid appearance; the eyes are open and staring; the limbs somewhat stiff; the tongue thrust a little beyond the teeth; and the epigastrium tense and tumid."

It is questionable with many physicians whether animation can be restored in drowned persons, after the heart has ceased its motions. There is sufficient evidence, however, to establish a belief, that under favorable circumstances, life may possibly be restored, even after the heart has ceased to act. When a person is drowned in very cold water, it will be more difficult to restore animation, in consequence of the heat of the body having been abstracted by the cold.

It is generally believed that in drowning, water is conveyed into the lungs, but as long as life remains the glottis is closed, preventing the admission of water into the windpipe.

TREATMENT.—As soon as the patient is rubbed dry, and covered warm, stimulating injections should be administered. A table-spoonful of the third preparation of lobelia, or even two or three ounces may be administered at once in luke warm water. No other means can be employed that are so well calculated to arouse the nervous influence, and excite respiration, as powerful stimu-

lants administered by injection to the bowels, or introduced into the stomach by means of a stomach pump or gum elastic catheter. The injection should be frequently repeated. In the place of the third preparation of lobelia, pepper tea or No. 6 may be employed. The patient should be wrapped in warm dry blankets, and hot bricks, or bottles of hot water, covered with damp cloths, placed at the feet, and around the body, or the vapor bath applied. The body and limbs may be rubbed with the warm hand, or with dry flannels. Stimulants, such as pepper sauce, or No. 6, should also be applied to the surface. The external heat must be applied gradually, as the "inward heat" will be very much exhausted. The steam, however, may be of the usual temperature, by observing the precaution to wet the face and surface of the body frequently with cold spirits or vinegar.

Unless there is some degree of sensibility existing, it will be difficult to introduce medicine into the stomach, except by means of the stomach-pump or catheter. In attempting to introduce a tube in the stomach, care will be necessary to avoid the wind-pipe: the jaws should be opened wide, the head turned backwards, and the end of the tube placed against the back part of the throat, which will direct it into the right channel. As soon as the tube is introduced, stimulants may be conveyed through it into the stomach. The third preparation of lobelia should be employed, if at hand; or if not to be obtained, capsicum tea, No. 6, or brandy, may be substituted.

Symptoms which accompany returning animation.—Twitching of the muscles about the mouth; soon followed by efforts to breathe; sudden motions of the limbs; "a small and weak pulse, beating at irregular intervals; and a discharge of frothy fluid from the mouth."

As soon as the patient can swallow, stimulants such as the third preparation of lobelia, or pepper tea, must be given in small doses, and these frequently repeated.

Wine, whey and essence of beef, should be given as nourishment, and especial care should be taken to keep the patient comfortably warm. *Vomiting* is often induced when animation is being restored, which is always a favorable symptom.

# SUSPENDED ANIMATION FROM CARBONIC ACID GAS

#### SECTION LXX.

Carbonic Acid Gas, produced by burning charcoal, when taken into the lungs undiluted with atmospheric air, will very quickly destroy life. The gas not only excludes oxygen from the lungs, which is necessary to life, but it exercises a deadly influence upon the nervous system, speedily destroying its sensibility.

A person in a tight room where there is a furnace of burning charcoal, will soon become affected with giddiness and faintness; followed by stupor and insensibility, and unless carried into fresh air, life soon becomes extinct. Many deaths have been occasioned from sleeping in rooms in which charcoal was burning, and where there were no means for the escape of the gas.

Carbonic acid gas being heavier than atmospheric air, settles next the floor and fills the room from below upwards. Hence a person lying on the floor, would become affected by it, and sink into a state of insensibility; whilst another person occupying a position near the ceiling would be very little, if at all, affected by it. This affords an explanation why dogs and cats are sooner affected than men, in the same room—the animals inhaling the gas, whilst a man would be above it.

TREATMENT.—In suspended animation from the inhalation of carbonic acid gas, the patient must be removed immediately into a current of fresh air; and cold water dashed on the face and breast. If the patient be entirely insensible, the clothing should be stripped from the body, and cold water dashed on the head and breast, or the head raised and a stream of cold water poured upon it. Sometimes the first dash of the cold water will occasion a convulsive effort to breathe.

A stimulating injection should be administered as early as possible, and frequently repeated. The third preparation of lobelia with luke warm water, will form the most effectual injection, and in the

absence of this, some other stimulant, as composition or pepper tea, wine, or vinegar and water. The surface of the body and limbs should be rubbed freely, and bathed with whisky or vinegar, and if the patient can swallow, stimulants must be given in small doses and frequently repeated.

When breathing becomes fully restored, the patient may be rubbed dry, and placed in bed, and should continue to take frequently of stimulants, such as, capsicum, composition, or wine whey, with carbonate of ammonia. If the patient has not vomited, the third preparation of lobelia may be given in bayberry tea, and the dose repeated until vomiting takes place.

In some instances after vitality is restored, vigorous reaction ensues: "the heart palpitates vehemently; the pulse is full, strong, and hard; the vessels of the head turgid, and a disposition to heavy sleep ensues. Under these circumstances the third preparation of lobelia must be given freely, with a view to give the stomach power to regulate the circulation; and in order to place the system more fully under the influence of lobelia, injections composed of lobelia powder in warm water must be administered. The face and breast should be bathed with vinegar or spirits; and warmth applied to the feet.

# SUSPENDED ANIMATION FROM LIGHTNING.

### SECTION LXXI.

Persons struck by lightning require the same treatment as above directed: to dash bucketsfull of cold water over the face and breast, and to apply stimulating injections to the bowels, are the most important means for restoring animation.

Case.—The following case is reported in the fifth volume of the Philadelphia Botanic Sentinel, by Dr. Imri Spruill of North Carolina: "Mr. Lewis Harrell was ealled last May to a negro woman who had been struck by lightning; and, said he, when I got there

I saw about twenty men standing around a negro woman, who appeared to be (as it was thought by all) in the agonies of death, and speechless. Knowing the efficacy of the Thomsonian remedies, I gave her a large dose of the third preparation of lobelia, which soon aroused her, and enabled her to speak. On making an examination I found that the light had struck the back part of her head, and passed obliquely to the breast, tearing a new homespun cap up like gun wadding, and taking a strip of skin off in its way two inches wide, and extending over the breast and lower part of the abdomen to the groin, leaving a streak from the groin down to the sole of the foot. Her under garment was split throughout its entire length with as much precision as though it had been done with a knife. Two or three courses of medicine were administered, and she recovered rapidly.

### VARIOUS FORMS OF DISEASE OF THE EYES.

### SECTION LXXII.

INFLAMMATION OF THE EYES FROM TAKING COLD.

When the eyes become inflamed by taking cold in them, the inflammation is usually in the membrane that covers the white of the eyes, and the inner surface of the eye-lids. The direct effect of cold upon the eye is to weaken and debilitate it; and the inflammation that ensues is an effort of nature to remove the effects produced by the cold.

Symptoms.—These are a redness more or less extended over the white of the eyes; an appearance of inflammation on the under surface of the eye lids: a feeling of sand in the eye; a profuse secretion of tears, and sometimes a thick matter in the corners of the eyes, and about the eye-lashes, and a strong light is intolerably painful.

LOCAL TREATMENT .- In inflammation of the eyes proceeding

from all kinds of cold applications are to be avoided: for although they may afford temporary relief, they scarcely ever fail of exercising an injurious influence. It is in inflammation of the eyes, arising from wounds or bruises, that cold applications in that variety of inflammation of the eyes, which they term catarrhal opthalmia.

Moderately stimulating washes, and warm poultices may be employed with more advantages in all cases of inflammation of the

eyes, arising from cold.

EYE WASHES.—In the early stages of the inflammation, benefit may be derived by washing the eyes occasionally with warm catnip tea, a weak infusion of lobelia, or even with a weak tea of capsicum. The object of stimulating washes is to increase the secretions from the inflamed mucous membrane. It is in this way that stimulants lessen inflammation of the mucous membranes. The design of the inflammation is to restore the secretions, and hence the application of pure stimulants operates in harmony with the designs of nature.

Astringent washes of every description are improper in the earlier stages of the inflammation, except there be a stimulous in the wash sufficient to overcome the drying effect of the astringent. Astringent washes are applicable to chronic inflammation of the eyes.

Poultices of elm, flaxseed, or Indian mush, adding a small portion of ginger, applied to the eyes warm, and wet occasionally with warm catnip tea, or warm water, will prove serviceable if not continued too long at a time. The constant application of a poultice for several days, would relax the parts so much that the cure might be retarded thereby. The poultice should be covered with gauze or book muslin to prevent its adhering to the eye.

Constitutional Treatment, in inflammation of the eyes, is, in many instances, of greater importance than local applications. Inflammation of the eyes is generally associated with a disordered state of the system. The eyes being weakened by a weakened condition of the vital powers of the system, are thus predisposed to disease from the impression of cold, and when inflammation comes on, the cure will be greatly facilitated by improving the

condition of the general health, either by the use of pure stimulants—composition, capsicum, or simple herb teas, together with the use of the warm foot bath, and a careful avoidance of cold; or by a course of medicine, followed by the use of the stimulants above mentioned, with a view to promote perspiration, and sustain and strengthen the curative efforts of the constitution.

If there be violent pain in the head, injections should be used, containing a portion of lobelia; the feet kept warm, and broken doses of lobelia given in combination with the stimulants.

Inflamed or sore eyes from dust, seldom require any other attention than to wash them with warm milk and water.

### RHEUMATIC INFLAMMATION OF THE EYE.

### SECTION LXXIII.

The globe of the eye, except the transparent portion in front, containing the pupil, and an opening on the back part, for the passage of the optic nerve, is covered by a membrane of a fibrous structure, similar to the tendons of muscles and ligaments about the joints. It is inflammation of this fibrous structure that constitutes rheumatism. When the fibrous membrane of the eye becomes inflamed, it is attended with pain which resembles rheumatic pains, and hence it is termed rheumatic ophthalmia. The difference therefore between catarrhal ophthalmia and rheumatic ophthalmia, is the difference in the location of the disease: in the first, the inflammation is seated in the mucous membrane of the eye—in the latter, the inflammation is seated in a fibrous membrane, beneath the mucous membrane.

Symptoms.—These are violent pain in the ball of the eye, "extending to the temples, teeth, lower jaw, and internal ear. The pain is continuous, with occasional fits of aggravaion, and is almost always much more severe at night than during the day.

The white of the eye is of a yellowish-red tinge terminating abruptly at the cornea—which latter (the transparent part of the centre of the eye-ball) becomes dull, cloudy, and, as the disease advances, more opaque in the centre than at the circumference." The flow of tears is at first diminished, but in the course of the disease it becomes copious.

CAUSES.—Rheumatic inflammation of the eye is generally brought on by exposure to cold and dampness. More especially is it apt to occur from exposure to cold when the system is under the influence of mercury.

TREATMENT.—Constitutional treatment is necessary in most cases of rheumatic inflammation of the eye. The means to be employed are such as will restore the natural warmth of the system, cleanse the stomach and bowels, promote perspiration and restore digestion.

First give stimulants, composition or capsicum tea, and if the pain be severe, attended with an undue determination of blood to the head, the feet must be placed occasionally in warm water, containing a portion of mustard; and stimulating injections containing a portion of lobelia, administered once or twice a day, and the patient kept warmly covered to favor perspiration. If this course of treatment prove insufficient to relieve the pain, a course of medicine must be given and repeated according to the urgency of the symptoms.

The compound lobelia pills, if taken in doses of two or three pills every two hours, will not only afford sufficient stimulous in ordinary cases, but by them the system is brought under the continued influence of lobelia, which is of the highest importance, more especially in the earlier stages of the disease.

When the disease becomes chronic, which means that it becomes protracted and unaccompanied with fever, or other symptoms of reaction, gum guiacum, and bitter tonics, are to be employed, together with the general course of treatment above recommended.

Local Applications.—In the early stages of the disease, when the secretions of the eye are deficient, and the pain in the eye severe, moderately stimulating applications, either in the form of poultices or washes, are indicated for the purpose of restoring the secretions of the eye. A weak infusion or diluted tincture of lobelia, or weak capsicum tea, may be used for this purpose, and the same kind of poultice applied as recommended in catarrhal ophthalmia.

# SUPPURATIVE INFLAMMATION OF THE EYES.

### SECTION LXXIV.

Symptoms.—This variety of disease of the eyes is marked by a sudden swelling of the eye lids, attended with a copious discharge of a thick white or yellowish matter. In severe cases the eye-lids become enormously swollen, more especially the upper lid. There is more or less pain in the eyes, even in the milder form of the disease, and where the swelling is very great, the attending pain is usually violent. The mucous membrane covering the eye-ball becomes also much swollen, rising up like a spongy mass and sometimes overlapping the pupil. A copious secretion of pus takes place soon after the swelling commences, though sometimes the matter does not escape, as it is formed, in consequence of the swelling, causing the eye-lids to be firmly closed. The pus being thus retained, distends the eye-lids in the form of a round fluctuating tumor, the contents of which, sooner or later, escape from between the eye-lids. In the severe form of the disease, there is always considerable constitutional disorder, and generally high fever at night.

Under a proper course of treatment, the symptoms, even in this severe form of the disease, will generally begin to moderate in the course of a few days, and the eye gradually recover, and become restored to a healthy condition. Occasionally, however, the ball of the eye suppurates, partially or wholly destroying the sight. Infants are occasionally attacked with sudden swelling and inflammation of the eyes, attended by a free discharge of matter. In them the disease very rarely injures the eyes permanently.

A very destructive form of disease of the eye prevailed epidem ically, and to a great extent, in Egypt, "during the British expedition under Sir Ralph Abercromby." This disease received the name of Egyptian opthalmia.

Causes.—The Egyptian opthalmia was supposed to be caused by a suddenly variable temperature—an atmosphere loaded with dampness and humidity, by the prevalence of a hot wind loaded with fine particles of sand, and a bright and piercing light of the sun. Another and more frequent cause of the disease in this country is the accidental application of certain poisonous substances to the eye, more especially the matter from the venerial disease.

The disease, as it occurs in infants soon after birth, is occasioned by some morbid secretion being introduced into the eye at the time of the infant's birth. On this subject Dr. Eberle observes: "I have never known a single instance of this disease occurring in infants soon after birth, when, upon inquiry, I did not learn that the mother had been affected with leucorrhæa, or some other morbid vaginal secretion."

Of the Consequences of this form of Disease.—As it occurred epidemically in Egypt at the time above mentioned, the disease proved very destructive to the eyes. The introduction of the matter of the venerial disease into the eye sometimes occasions a loss of its sight, and this form of disease is always difficult to cure. As the disease occurs in young infants it is seldom followed by serious injury of the eye, the matter occasioning the disease being of a less destructive nature than that of ghonorrheal poison. A mild form of suppurative inflammation of the eye is sometimes occasioned by constitutional disorder, and also from ordinary atmospheric influences, but which seldom or never occasion any serious injury to the eye.

TREATMENT.—In all violent attacks of suppurative inflammation of the eye, a vigorous course of constitutional treatment is imperiously demanded. The patient should have a thorough

course of medicine administered early, and the same repeated daily, until the disease begins to decline. If it should be inconvenient to administer a regular course of medicine, the warm foot bath must be used, and composition or cayenne pepper tea given freely: after this an emetic must be given, and if the symptoms continue to be of a violent character, doses of lobelia in composition tea, must be continued every hour or two; stimulating injections administered three or four times a day; hot bricks wrapped in damp cloths placed at the feet; and the head kept elevated by pillows. If there be high fever, with violent pain in the head and eyes, benefit will be derived by administering a small teaspoonful of lobelia powder in luke warm water, by injection, and retained. This will relax the system, and generally cause the patient to vomit, from which he will invariably obtain more or less relief from his sufferings.

When the disease is of a mild form, and also when it is on the decline, a less energetic treatment will be required—merely giving occasionally composition, ginger, or pennyroyal tea, to favor a determination to the surface, and warm applications to the feet. In all cases, however, when the eyes are very much swollen, the system must be placed under the influence of lobelia, and continued in a state of moderate relaxation, more particularly during the early stages of the disease.

In infants constitutional treatment is seldom necessary, unless the disease of the eyes be brought on by a disordered condition of the stomach and bowels. If the bowels be disordered, injections must be administered. These may be prepared of simple bayberry tea, adding half a teaspoonful of the tineture of lobelia to each injection, and the same given by the mouth in small doses: a teaspoonful of bayberry tea with four or five drops of the tineture of lobelia, repeated four or five times a day.

Local Applications.—As the disease occurs in infants, I have found a weak infusion of lobelia, combined with raspberry tea, to be an effectual application. The eyes to be washed occasionally with the above tea, warm. All cold applications are injurious. It may be necessary, in some instances, even in infants, to apply a warm emollient poultice. Slippery elm powder, white pond

lilly, and crackers rolled fine, with a small portion of ginger, forms a suitable compound for a poultice, which should be wet with warm water.

The same local applications, viz: lobelia and raspberry tea, and warm poultices, will be proper in the early stages of the same disease, without regard to the age of the patient, or the cause of the disorder. In a later period of the disease, in adults, when the swelling has subsided, and the eye lids are in a relaxed condition, Dr. Thomson's eye water, simple tincture of myrrh, a tincture of myrrh, a tincture of myrrh and bayberry, or No. 6, will be suitable applications. When the disease has been produced by the application of venerial poison, the eyes should be frequently washed with a strong infusion or tincture of lobelia.

In all cases where the disease has become protracted, and the patient is in a feeble condition, tonics, such as quassia, wormwood, Peruvian bark, Virginia snake root, gentian, &c., must be given, together with stimulants and nourishing food, in order to excite and sustain the curative efforts of nature.

### SCROFULOUS SORE EYES.

### SECTION LXXV.

In this variety of disease of the eyes, the inflammation is mostly confined to the margins of the eye lids, attended with extreme sensibility to light, a profuse secretion of tears, and a thick matter exuding from the edges of the eye lids and the roots of the eye lashes, which glues the lids together during sleep.

This form of disease prevails most in childhood, occurring in those of delicate constitution. Sometimes the eyes become diseased from want of cleanliness alone.

In some cases the patient cannot bear the light to come to the eyes, he keeps them constantly closed, places his hands over them, and lies with his face downward.

Scrofulous disease of the eye is generally protracted in duration—in many instances continuing with a greater or less degree of severity many months or even years, until by the aid of medicine, and other means, or by the natural increase of strength, the constitutional powers are invigorated and the disease thereby removed.

TREATMENT.—Scrofulous sore eyes, being a constitutional disease, depending upon a feeble organization, not only demands constitutional treatment, but in the great majority of cases, requires a considerable period of time to effect a permanent cure. In general, much medicine will not be required. Exercise in the open air, wholesome nourishing food, warm clothing, keeping the feet dry and warm, cleanliness, a cold shower bath or sponging the body with salt water in the morning, and frictions of the surface with the flesh brush or salted towel, are important means for improving the general health, and strengthening the constitution.

When the appetite is bad, the breath offensive, or the stools exhibit an unhealthy appearance, an emetic will be beneficial: this will operate still more effectually after the administration of a vapor bath. In recent cases the operation of an emetic will generally be followed by a manifest improvement in the condition of the eyes, and sometimes it alone will effect a cure.

The Compound Lobella Pills may be used with benefit in almost all cases of chronic disease, whether it be of a scrofulous character or otherwise. These pills do not affect the bowels in the way that cathartics operate; they stimulate the peristaltic action of the bowels, and excite the secretions of their mucous membrane without disordering the functions of the bowels, or weakening the vital powers, whereas cathartics disorder the stomach, and weaken the functions of the bowels. The continued use of a cathartic—for instance, a small dose of Epsom or Glauber salts, taken daily, or every few days, by provoking irritation in the bowels, and lessening the determination of blood to the surface, may diminish the inflammation of the eyes; but the constitutional disorder will be increased, because digestion must necessarily be impaired, by the action of the salts—they merely changing the symptoms of the disease without restoring the health. Let a child in good health

be purged with salts every day, and this continued for a week, the digestive powers at the end of the week will be impaired, the warmth of the system will be reduced, and the bowels will remain enfeebled and inactive for several days after. The absurdity of administering such medicine to one whose constitution is feeble, and the general health deranged must be apparent to every unprejudiced mind. To change the symptoms of disease by the use of cathartics, or by administering poisons, is one thing, but to remove disease from the system, is quite a different matter.

Purified Charcoal may be used with advantage in cases of costiveness, more particularly when accompanied with an acid condition of the stomach. The dose is a teaspoonful two or three times a day, taken before meals.

Salt and Vinegar.—When patients have an inclination for acids, such as vinegar, or lemon juice, as they frequently have in scrofulous complaints, where digestion is impaired, a mixture of salt and vinegar will sometimes be found of signal benefit in improving digestion.

Toxics must be given when the patient is in feeble and relaxed condition. Spice bitters are proper to be given during any period of scrofula: they may be given both as a mild tonic, and a stimulant, supplying the place of stronger stimulants and tonics, in milder cases of the disease.

SARSAPARILLA.—A simple syrup of this article is an admirable medicine for scrofula in certain conditions of the system. I have occasionally observed the most marked benefit from its use in cases where the disease had apparently come to a crisis, the patient remaining in a weak and languid condition. But whether the patient be most benefitted by the sarsaparilla or by the syrup of sugar, is not very easy to decide.

Local Treatment.—In scrofulous sore eyes, it will be found on examination that some of the eye lashes are dead, and thus operating as foreign bodies to the parts, occasion very disagreable itching in the eye-lids, and the formation of matter at their roots. The removal of these dead eye-lashes, therefore, is important in the cure of the disease. A little observation will teach one how to distinguish the living from the dead lashes, and they are very

easily removed, without pain, by a pair of tweezers. I have, on several occasions removed, at one time, over one hundred dead eye-lashes from the eye-lids of a patient affected with sore eyes; and sometimes this is all that is required in the way of treatment: the eyes becoming well soon after. In scrofulous constitutions, however, the disease of the eyes will rarely be radically removed until the general health be restored, or at least manifestly improved.

Astringent and stimulating washes may be used with more or less benefit in sore eyes of long continuance. The preparation called Thomson's eye water, may be employed. Where the sensibility of the eye is very acute, this eye-water may be modified by a teaspoonful of strong tea made of witch-hazle leaves, or poplar bark, added to a teaspoonful of the eye-water.

The Diet must be light yet nourishing; fresh beef and mutton, poultry, wild game in season, eggs, boiled rice and milk, boiled milk and toast, toast and cream custard, stale bread and butter, black tea, chocolate, and all wholesome vegetables may be used; provided they be found to agree with the stomach.

When scrofulous sore eyes are accompanied with eruptions on the face, or running sores behind the ears, the treatment should be the same as already described, observing especial care when vapor is administered to protect the skin surrounding the affected parts from the irritating secretions which the steam will cause to be discharged from the eruptions. The secretions from such eruptions sometimes accompanying scrofulous sore eyes, are so acrid that they produce an eruption on the surrounding parts wherever they are touched by them, and in this way the disease will spread over almost the whole of the face and sometimes extend from behind the ears down to the shoulders, and cover a portion of the back. This may in general be prevented by bathing the parts surrounding the eruption with No. 6, or the tincture of lobelia, immediately after the bath, the parts being protected at other times when the eruptions are discharged. These eruptions require the same plan of treatment recommended for the cure of scald-head, namely: to prevent the admission of air to the eruption by the application of salve or ointment, together with the use of medicines for correcting the general health.

Case.—A little boy, living in Christian street, was affected with scrofulous sore eyes, attended with eruptions over the face and back of the ears, and after the disease had continued more than eighteen months, the patient was placed under Thomsonian treatment, which speedily improved the general health, but the eruptions suppurated freely, causing extensive patches of raw surface secreting pus. Necessary care was not taken for preventing the discharge from affecting the surrounding parts, and the disease consequently commenced spreading considerably. The parents became discouraged, and applied again to the old practice. The treatment next pursued consisted in the continued use of salts, and cooling applications to the surface. Under this course of treatment the determination of blood to the surface was lessened, the system became cold and inactive, and as the disease left the face, the hip and knee became affected with scrofula, attended with years of suffering, and followed by distortion of the limb. Is it not probable that the cooling treatment occasioned the disease to become fixed in the hip, which would have been kept on the surface and eventually cured under Thomsonian treatment, and the disease thus prevented from seating itself in the hip?

### BLINDNESS.

### SECTION LXXVI.

(TOTAL OR PARTIAL.)

A TOTAL or partial loss of sight is caused by a variety of forms of disease of the eye, or, more properly, different parts of the eye are liable to become diseased, occasioning loss of vision. Thus blindness may be produced by disease of the optic nerve, which conveys impressions to the brain. This form of disease is called amaurosis.

A very common cause of blindness is an opacity of the crystalline lens, or its capsule, designated by the term *cataract*. Sometimes a total or partial loss of vision depends upon disease of the transparent cornea of the eye, which is liable to become clouded and thickened; and occasionally it becomes very much swollen, bulging out from the centre of the eye-ball, forming a tumor as large as a cherry. The eye is also liable to dropsy, cancer, and to gangrenous ulceration, which happily however, are of very rare occurrence.

Symptoms of Amaurosis—Disease of the Nerve of the Eye. In this form of the disease the eye does not present any particular appearance of disease upon a superficial examination, except that the expression is vacant, but on a closer inspection we find the pupil dilated, and, on applying a lighted candle near, the contracting power of the pupil is observed to be either lost or greatly diminished. "There is frequently the sensation as if a cloud were before the eye," and the pupil often presents a greenish appearance. The sight is obscure, or the power of seeing is lost.

Causes.—Close and long continued application of the eyes to minute objects, more especially by candle light; paralysis of the optic nerve from disease of the brain, or from constitutional disorder, is the usual cause of amaurosis.

TREATMENT.—Almost the only hope in cases of amaurosis, is an early and vigorous course of constitutional treatment, with a view to restore the circulation of nervous fluid in the diseased nerve. Frequently, however, the disease depends upon causes that render all medical means abortive; still a trial should be made, as by it the sight may possibly be restored, or at least greatly improved. Many cases have been cured by the use of emetics.

When amaurosis is connected with manifest derangement of the general health, there is stronger reason to anticipate benefit from the operation of emetics, but still more from full courses of medicine.

Besides constitutional treatment, stimulating washes should be frequently applied to the eye, such as capsicum tea, or Thomson's eye water, and the patient continue as much as possible in the light. The frequent application of volatile salts to the nose, and snuffing freely of composition or other stimulating powder, may assist in restoring the function of the optic nerve.

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Cases of amaurosis have been cured by the application of electricity and galvanism.

Concerning the treatment of Cataract little need be said here, as the disease is one which requires an operation by the hands of a surgeon. In the incipient stage of cataract, however, a proper course of constitutional treatment may in some cases prevent the further progress of the disease, and even cause the absorption of the cataract. The constitutional treatment for cataract does not differ from that recommended in amaurosis.

### STYE.

#### SECTION LXXVII.

The formation of a small abscess on the eye lid, called a stye, is of very frequent occurrence. It is generally occasioned by a disordered condition of the stomach. Sometimes it is caused by the presence of a dead eye lash, the abscess being found at the root of it.

TREATMENT.—When the stye becomes painful and considerably inflamed, cooling applications should be made to the eye—frequently wetting the eye with cold water, or applying a poultice of slippery elm, or of flaxseed stewed with Indian meal, until it becomes well softened. If there be a dead eye lash in the centre of the stye, it should be pulled out, which sometimes, when done early, will check the further progress of the abscess. Rubbing the stye, when it first appears, with cold metal, a silver spoon or knife blade will, it is said, prevent an abscess from being formed in many instances.

# FISTULA LACRYMALIS.

#### SECTION LXXVIII.

(OBSTRUCTION OF THE DUCT WHICH CONVEYS THE TEARS FROM THE EYE INTO THE NOSTRIL.)

The tears and mucous secreted in the eye are conveyed into the nostril through a small duct, which is liable to become obstructed by various causes, and then the tears instead of passing into the nose, are obliged to flow over the cheeks, proving a source of extreme annoyance.

The obstruction may take place at the inner corner of the eye, where the duct commences, and may be remedied by the careful introduction of a fine silver or gold pin through the duct into the lachrymal sac, which is an enlargement of the duct about a quarter of an inch from its commencement. If the obstruction be seated in the duct below this little sac or bag just alluded to, the tears will pass down into the sac, and being retained there in consequence of the obstruction below, it becomes swollen into a round tumor as large sometimes as a chesnut. The tumor will be situated a short distance below the eye near its inner corner. By pressing upon the tumor the contents will be forced upwards and pass out at the eye, or if the obstruction below the tumor be not complete, the tears contained in the sac may be forced into the nostril. "The complaint sometimes remains in this state for years, with little inconvenience, pressure being occasionally made upon the sac to empty it." Sometimes the tumor suppurates and breaks externally, and the tears will pass out through this opening, and flow over the cheek. The sac is now very liable to frequent attacks of inflammation and suppuration.

TREATMENT.—In the early stage of this complaint constitutional treatment, particularly the vapor bath with an emetic, have in some instances overcome the obstruction and effected a permanent cure.—The disease, however, is seldom curable by constitutional

treatment—the only chance of success by it is in the early stage, and especially when the obstruction is owing to inflammation and swelling of the duct. When these exist the use of the vapor bath, together with relaxing the system fully by lobelia, and promoting perspiration and an equal circulation by the use of stimulants, such as capsicum or composition, may prove successful in restoring the duct to a healthy condition.

When the tears flow over the cheek, and the lachrymal sac, just below the eye, is not swollen, it affords evidence that the obstruction is in the duct between the eye-lid and the lachrymal sac. This obstruction may be removed by passing a small silver or gold pen down the duct into the sac.

Sometimes the lachrymal sac becomes diseased, and secretes from its surface a thick matter which does not pass readily through the duct, and the sac becomes distended, requiring to be pressed upon in order to force the thick matter up to the corner of the eye, or down into the nose.

A gentleman not long since told me that he was cured of an obstruction in the duct that leads the tears into the nose, by the operation of a course of medicine. The disease had continued for many months, the tears passing over the cheek. During the operation of the emetic the tears resumed their natural channel by the removal of the obstruction in the duct. It is not to be inferred, however, that many cases of this affection can be removed by a course of medicine. It is only under particular circumstances that we can reasonably anticipate a cure by constitutional treatment.

A common practice in this complaint is to introduce a gold or silver tube down the course of the duct, and thus lead the tears into the nostrils. In some cases this tube answers a good purpose—in others it does injury.

# INSANITY - MENTAL DERANGEMENT.

## SECTION LXXIX.

Insanity, in all cases, should be viewed and treated as a bodily disease; and most of cases originate from indigestion direct, and when brought on by overpowering disappointment or grief. The powers of digestion are suspended, and if long continued a certain diseased state is established, effecting a palsied state of certain organs, which can be restored only by restoring the lost state of the constitution, that maintains the full, free, and universal circulation.

To accomplish the ends indicated, first, commence by giving the patient a gill of some warm bland tea, sweetened to suit the taste, and repeat the same every twenty minutes until the stomach is properly distended. Then give a gill of strong bayberry tea with a tea-spoonful of the anti-spasmodic drops in it, and repeat the bayberry tea in fifteen minutes, with a tea-spoonful of the brown lobelia, (i. e. the seed finely pulverized,) in it; repeat this dose every ten minutes, with a small quantity of salæratus in it, (say as much as the size of a grain of corn,) until vomiting is free and copious. Then give the patient some gruel or milk porridge, and let him rest for half an hour or so; after which put him over the medicated vapor bath, and steam him until the perspiration is free and general; then wash the skin well with warm water and soap, and then let him stand erect, if he is able, if not let him sit, in order to receive the shower bath, which is to be applied by pouring a half bushel of cold water into a large wire sieve, held about six feet above the patient, so that the water may fall on the patient's head and run down equally over the whole body. Now have him wiped dry and clothed, and give him a cup of warm tea, and render him as cheerful as you can for some hours, (say three or four,) then give him an injection or two to evacuate the lower portion of the bowels; then give him a sufficient quantity of the vegetable cathartic powders to produce three or four stools. The above constitutes a course of medicine. This course must be administered every other day for the first week, and then every fourth day.

The intermediate treatment must be adapted to the peculiarities of the ease. Anti-spasmodics, stimulants and tonies should be used both internally and externally, in order to keep the circulation free and well balanced.

REGIMEN.—The diet must be of good nutritious quality, and must be taken in moderate quantities, just sufficient to nourish and strengthen the body. Persons afflieted with this disease, should neither be starved nor gormandized, but should occupy a medium between the two extremes, and this is a good rule to be observed in the whole course of management of the ease. Much will depend upon the conduct of the physician. The practice of some is harsh, eensorious, and tyrannical towards lunaties. This conduct is very reprehensible, because it prevents the recovery of the patient. The physician's language should be mild and respectful, and although the remarks of the patient may be absurd, he should never contradict them. In a word, the law of kindness should rest upon his tongue. Acts of justice and a strict regard for truth are calculated to secure the respect and obedience even of deranged patients. Everything necessary for their comfort ought to be provided for them, and every promise made should be strictly and punctually complied with.

Dr. Rush, in his observations on this subject, says: "I shall only add that, in those eases in which the memory has been greatly impaired, they seldom forget three things after their recovery, viz: aets of eruelty, aets of indignity, and acts of kindness. I have known instances in which the former two have been recollected by them with painful, and the last with pleasant associations for many years. In gratitude for kindness and favors shown to them, they exceed all other classes of patients after their recovery. A physician once asked a young woman of the society of Friends, whom he had assisted in curing in the Pennsylvania Hospital, if she had forgiven him for compelling her to submit to

the remedies that had been employed for that purpose: "Forgive thee?" said she; "I love the very ground thou walkest on."

"Should not persuasion and kindness be sufficient to produce obedience, it will be necessary to use coercion; but it must be consistent with the greatest kindness. No harsh or severe measure must be taken. Moderation and decision of character should be observed."

"Insane patients," says Rush, "should never be contradicted, however absurd their opinions and assertions may be; nor should we deny their requests by our answers when it is improper to grant them. In the second grade of the disease we should divert them from the subjects upon which they are deranged, and introduce, as it were, accidentally, subjects of another and more agreeable nature. When they are recovering we may oppose their opinions and incoherent tale by reasoning, contradiction, and even ridicule."

"Dr. Burton recommends, in the highest terms, the reading of the Bible to hypochondriae patients. He compares it to an apothecary's shop, in which is contained remedies for every disease of the body. I have frequently observed the languor and depression of mind which occur in the evening of life, to be much relieved by the variety of incidents and the sublime and comfortable passages that are contained in that only true history of the origin, nature, duties, and future destiny of man. A Captain Woodward of Boston, who lately suffered all the hardships of shipwreck on an inhospitable island in the East Indies, found great comfort in revolving the history of Joseph and his brethren in his mind. A Captain Inglefield, while in a similar situation, revived the spirits of himself and crew, by relating pleasant stories."

Music has a tendency to tranquilize the mind, and may be practiced. M. Luther has left the following testimony in its favor: "Next to theology, I give the highest place to music, for thereby all anger is forgotten; the devil, melancholy, and many tribulations and evil thoughts are driven away." For the same reason that tragedies afford more relief than comedies, plaintive tunes are more useful than such as are of a sprightly nature." "I

attended a citizen of Philadelphia," says Rush, "in paroxysms of this disease, who informed me that he was enred of one of them by hearing the old hundred psalm tune in a country church. His disease, he said, instantly went off in a stream of tears. "Dr. Cardan always felt a suspension of the auguish of his mind from the same cause. And Cooper tells his friend Mr. Hayley, in one of his letters, that he was relieved as soon as his troubles gushed from his eyes."

Persons laboring under insanity should take exercise in the open air. If they are furious, they should be secured with bandages, or a straight jacket, and walked in the open air two or three times a day, and permitted to have as much liberty as their situation will admit of in safety. Show to the patient that you are his friend, and also that you are determined in your course. You must be very candid and positive, at the same time, exercising every possible kindness and attention towards the patient.

I will conclude this important chapter by introducing the following extracts, from which some important lessons may be learned.

"Mental Derangement.—Singular Case.—Baron Pisani, an illustrious and devoted philanthropist in Palermo, a man of fortune and refined education, took upon himself the direction of what was then called the Mad-House of Palermo, but which his humanity and unwearying exertion soon transformed into an ordinary and comfortable abode for its once wretched inmates.

The miserable condition of every thing belonging to the house, when the baron first entered upon his duties, was indescribable. It was then the abode of desolation and wretchedness. He found there a few squallid, forlorn beings, with scarcely a human appearance, in the midst of chains, filth, and malaria. It resembled more a menagerie of wild beasts than a human habitation. The treatment was worse than that which was formerly inflicted on felons and traitors. He threw off their chains. He comforted them by consoling language and still more by kind actions. He gave them refreshing drinks and good food. He used towards them an affable and affectionate manner; and, although deprived of reason, they were conscious of the benefits they had received from him, and often the poor forsaken creatures would embrace him as

their only friend. This stimulated him to new exertions. From sickly, pallid, and unhappy, they become healthy and cheerful, and many showed him the highest gratitude.

The Baron relates a singular cure which he effected a few years ago by a simple stratagem which suddenly occurred to him at the time. A woman, on becoming deranged, had resolved never to quit a certain position which she had taken, which was stooping down as low as she could, still resting on her feet. This bent her knees to the utmost degree; but in this way she continued long after she was brought to the house. She had continued for ten years without extending her lower extremities. When she came under his charge, he long tried to awake her sensibility on some subject without success. At length he went to visit her one morning, and told her he had come to the determination no longer to lead a life of celibacy, and had come to ask her hand in marriage. She was at first indignant and requested him not to make fun of her. He pressed his suit with so much earnestness and with so many compliments, that at length she showed some attention to his conversation. He became more eloquent with arguments for their union and at last she smiled. It was the first time for ten years. She became more cheerful, laughed a little, and finally consented to marry him. The next day was appointed for the solemnization of the nuptials. All the tranquil insane were invited to the wedding. She was dressed and decorated like a bride, and then called to an elegant arbor where a feast was prepared for all the guests. One of the keepers was dressed as the Padre, a counterfeit ceremony was performed, and they all paid her particular marks of respect and congratulation giving her the title she had acquired of Baroness. She tried to walk, but was unable to straighten her knees. The tendons in the hams had become stiff and contracted. She was carried, and placed at his right hand at dinner. From this time her recovery commenced. By the employment of liniments, frictions, and exercise, the use of her limbs was gradually restored, and she is now an intelligent and respectable lady of Sicily, who often laughs with the Baron, whom she calls her esposo, at the amusing freak of the marriage ceremony. "-Thomsonian Rec, vol. iii. p. 265.

<sup>&</sup>quot; A CASE OF INSANITY .- A lady of this city, in feeble health,

some years ago fell from a carriage. She received a very slight bodily injury, but the fright produced a sudden and total alienation of mind. She soon became so entirely unmanageable, that her friends were obliged to remove her to the lunatic asylum at Bloomingdale. In a few months, under the treatment of that institution, she had so far recovered from her malady, as to hold intelligent conversation on many subjects, and her friends were allowed to visit her. On one occasion, when her husband visited her, while he was consulting privately with the superintendents, as to the manner in which he should leave without her knowledge, she left the room unnoticed, untied his horse, standing in front of the house, and seated herself in the wagon with the reins and whip in her hands, when she was discovered by the people in the house. The horse was young and spirited, and she had never reined a horse before. The agonies of the terrified husband, when he saw her apply the lash to the furious animal, may not be easily imagined. She started off at full speed. The husband called for a horse, and was already mounted in pursuit; and, although he followed on at a rapid rate, he soon lost sight of her amid the throng of carriages that crowded the road from Bloomingdale to New York. Breathless with anxiety and fear, he reached his home. He rushed into the house, and behold, there sat his wife in the parlor, to his extreme surprise, chatting in high glee with the family on the subject of her recent exploits. 'Ah,' said she to her husband, 'I saw you preparing to follow me, but I eclipsed them all.' (It was about the time of the famous races of the Eclipse horse with Sir Henry.) She had driven through the gateway into the yard in rear of the house, and, after giving the horse in charge of a servant, presented herself before her astonished family, to whom she was relating her adventure when her husband arrived. She did not return to the asylum. Her insanity continued, but it was of the least painful kind. It exhibited itself in extreme sprightliness and wit in conversation. To strangers, who had not known her disposition to be the reverse of gaiety, the observation that her spirits were too buoyant for a lady of her age, would not suggest itself. With the hope that country air and scenery might be beneficial to her, her husband,

some years after, removed to the State of Vermont, with his family. They had resided there about a year, when the house took fire and burned down. The terrible affright, occasioned by the disaster, it was soon found, had restored her to her right mind! The case is remarkable, in the fact that a cure was effected by the same means that produced the disease and that, too, after some sixteen years alienation of mind. The lady is now a resident of this city, and in perfect health."—New York Family Magazine.

"In a former number, we intimated that we should refer again to the report of the Superintendent of the Ohio Lunatic Asylum. Since that time, we have read the whole with much pleasure, and should be glad, had we room, to transfer a large portion of it to our pages. Notwithstanding the extent of accommodations in that very large building, we are informed that the officers "have been compelled to refuse a great number of applicants for want of room," and that "twice as many apartments would not be more than sufficient for the suffering insane of Ohio."

The report contains many very judicious and philosophical remarks respecting the condition, prospects, and proper treatment of the insane, such as these:

"Although there are moments when conscience will say, 'escape for thy life,' and he (the drinker) may seriously desire to reform, yet his stomach and nervous system are in a state of positive disease, which, by the laws of physical necessity, must rule and enslave the man, and experience and science both teach that seasonable restraint, with judicious medical treatment, would save many a noble mind"—and, "as a general rule, the decline and removal of delusive impressions, will depend upon the cessation of morbid excitement and irritation, and the perfect restoration of all the functions of the system to health."

This is all true; and therefore how important is it that the appetite and passions be kept, always, in health as wells as in sickness, under proper restraint, and directed by the unerring guide of physiological laws; and that, in disease, the medical practice be of the most judicious character.

## DELIRIUM TREMENS-MANIA A POTU.

#### SECTION LXXX.

(CRAZINESS FROM DRINKING.)

This is a species of mental derangement occasioned by habitual drunkenness; or, by the intemperate use of opium.

Symptoms.—The disease comes on after the excessive drinking of ardent spirits. The digestive powers are prostrated by the poisonous effect of the liquor; there is distress at the pit of the stomach, loss of appetite, nausea, great agitation and distress of mind, and tremulous motions of the limbs.

As the disease continues, the countenance of the patient becomes more expressive of alarm and suspicion; there is continual restlessness, and increased mental agitation. The tremor of the hands increase, and, in some instances, the whole muscular system is agitated, as though the patient were laboring under a fit of ague. "The eyes are cast about with quick and scrutinizing glances, or often fixed, apparently, upon some object that attracts the attention for a moment, and then quickly withdrawn. The patient is unable to sleep, either by day or night. He fancies that he sees snakes, cats, mice, and other animals, in his room, and disgusting vermin crawling over the bed and on his clothes, or fancies that various persons have entered his room, for the purpose of robbing, killing, or injuring him. To avoid these and other horrid illusions, he often calls out loudly for assistance; runs to the door to make his escape, or to the window to leap out; is greatly agitated, vociferates, threatens, and sometimes raves violently. Sometimes he fancies that he hears loud and strange noises around him over head, in an adjoining apartment, or loud and frequent knocking at the door. His mind and body are in a continued state of action; he calculates, projects, walks hurriedly about the room, thinks he picks up money, runs up the window,

and calls out to some imaginary person in the street, starts with terror and agitation from the presence of frightful and disgusting apparitions, insists that he is well and confined with some sinister intentions against him, and requests to be suffered to go out in pursuit of his usual occupation. If the patient be flatly contradicted, he usually becomes much exasperated, and insists with vehemence on the correctness of his notions; but when he is soothingly dealt with, he will now and then answer questions mildly and even distinctly; and by judicious management may, in general, be restrained without any violent coercive measures." The skin is cool and generally covered with perspiration.

In some instances the symptoms are slight, and pass off in the course of two or three days; whilst in others the patient becomes furiously crazy, does not recognize any one, halloes, or talks continually, and is controlled with difficulty.

The duration of Mania a Potu varies from two days to several weeks; and in some instances it has been observed to continue several months. Under a proper course of treatment, the patient will in general be restored to reason in less than a week from the commencement of the delirium. Much depends, however, upon administering the remedies early in the disease, as in many instances, when the disease is fully seated, it is with the greatest difficulty that the patient can be persuaded to take sufficient medicine to produce much effect. Mild cases of the disease have frequently been observed to terminate speedily after spontaneous vomiting, or the supervention of diarrhea.

FATALITY.—Delirium tremens rarely terminates fatally, except when it occurs in patients affected with extensive disease of the liver, or other important organ, or the constitutional energies are broken down, either by disease or a long course of intemperance.

UNFAVORABE SYMPTONS.—A rapid and very small pulse; coldness of the limbs; the skin covered with cold sweat; constant delirium; the pupil of the eyes contracted, and twitching or working of the muscles of the face, are symptoms indicating danger.

FAVORABLE SYMPTOMS.—One of the most favorable symptoms in mania à potu is an ability to sleep tranquilly, even though it may be of but short duration. The practice of giving opium to

produce sleep is often attended with injurious consequences; it prostrates the power of the stomach, and in many instances it increases the wakefulness and aggravates all the symptoms. At most it does but blunt the sensibility, without removing the cause, or restoring to the system its lost vitality.

Mania à potu essentially consists in a weakened condition of the vital principle. The functions of the stomach are prostrated; digestion is suspended; the system is not supplied with nourishment; the temperature of the body is reduced; the bowels are torpid or they may be provoked by the acid state of their contents, occasioning diarrhea; the nervous power is enfeebled; and the brain is deprived of its natural healthy stimulus, the morbid effects of the liquor having also previously weakened its functions. Nature struggling to regain her lost power occasions the excited condition of the system attending mania à potu.

TREATMENT.—The treatment indicated for the cure of mania a potu is to be such as will aid the efforts of nature to throw off the disease. This is all that medicine can do to benefit the patient in any case of disease. The warm foot bath, vapor baths, emetics, pure stimulants, astringent or anti-canker medicine, and injections are the means chiefly to be relied upon for the cure of this disease.

The warm foot bath should be used before giving an emetic, and in mild cases it may supply the place of the vapor bath.

THE VAPOR BATH relieves the symptoms by equalizing the circulation of the blood and nervous influence, restores for a time the natural heat of the system, and thus increases the sensibility of the stomach to the impression of medicines, rendering their operation more effective—throws deleterious substances out of the blood by exciting free perspiration and a determination to the surface: in fine it aids the effects of nature generally, to bring about a crisis, and cast off the disease. After steaming and the patient is rubbed dry, the surface may be bathed with No. 6, or stimulating liniment.

EMETICS.—I have invariably observed more benefit derived from the use of emetics than from any other means. Sometimes mania à potu is observed to terminate by spontaneous vomiting. Merely

evacuating the stomach is not sufficient, however, except in cases of a very mild character; the mucus membrane is in most instances thickly coated with morbid secretions, which require the continued use of stimulating and anti-canker medicine for two or three days, besides frequent vomiting, before the stomach will become cleansed of morbid secretions, and its power of digestion restored. The third preparation of lobelia is the best form, yet it may be taken either in powder, infusion, or in tincture. Whatever form of lobelia is used, it should be given in sumac or bayberry tea. After the operation of an emetic, if the symptoms be not very much relieved, a teacup half full of a strong decoction of bayberry or sumac, adding from a teaspoonful to a tablespoonful of the liquid of the third preparation of lobelia, must be given every hour or two, as the patient can be persuaded to take it,—this supplies the place of all other medicines. Sometimes it requires considerable management to induce the patient to take medicine. Thus if a patient have a craving for liquor, he will often take a dose of medicine on the promise of having after it some gin or brandy, or whatever other liquor he may crave; after taking the medicine a teaspoonful or more of the liquor should be given, diluted with water. I have known instances where lobelia has been taken freely in brandy and water, the patient obstinately refusing to take it in any other way. Some writers advocate the use of alcoholic liquors, as a remedy in this disease, whilst others oppose its employment on all occasions. I have in a few instances given patients liquor, but have never as yet observed any good effects resulting from it, but on the contrary, the symptoms have been almost invariably aggravated by it, except when given in very small quantities. The disease requires stimulants, but they should be pure stimulants and not the same poisonous articles that occasioned the disease. Although mania à potu seldom occurs whilst the patient continues to drink, the symptoms first appearing after the drinking is stopped, yet it is the drink that prostrates the vital powers and occasions the derangement which essentially constitutes the disease; and the longer the drinking be continued the worse it will be for the patient. The long continued use of opium will cause mania à potu, and the practice of prescribing this article as a remedy in disease, is almost

if not equally as absurd as to give a patient brandy to cure a disease brought on by its use. It is very desirable that the patient be able to sleep, not however by means of a drug that will deaden the sensibility of the brain, prostrate the powers of the stomaeh, and probably produce serious congestion in the blood vessels of the brain, and prolong the disease. In a mild case of the disease a dose of opium may sometimes cause the patient to sleep, and not be materially injured by it; but in those cases, a vapor bath and emetic, followed by broken doses of lobelia, would bring the disease to a crisis much sooner, and the cure be more complete than by the use of opium, or probably by any other means.

During the act of vomiting the patient's head should not be allowed to be lower than the level of his body, for the action of the blood vessels of the brain being weakened, the blood circulates sluggishly through them. This requires that the head be kept somewhat elevated, in order to favor the returning circulation. When the skin and extremities are cold an injection should be administered and also a vapor bath, before giving an emetic. If these cannot be accomplished in consequence of the strenuous opposition of the patient, still the lobelia should be given in some form. If injections can be given the lobelia powder may be administered in this way in luke-warm water, which if retained will occasion vomiting, and exert even a more beneficial influence upon the system than when taken into the stomach.

INJECTIONS.—Besides the plan just spoken of for placing the system under the influence of lobelia, stimulating injections will prove of especial service to the patient. By relieving the bowels they withdraw the excitement from the head.

Toxics.—When the disease is overcome, bitter tonies may be used to restore digestion.

OF THE EFFICACY OF THOMPSONIAN TREATMENT IN REFORMING DRUNKARDS.—Case I.—A man employed in the Sheriff's office of this city, had indulged in the use of strong drink, until he became so much a slave to it that he was rarely entirely sober. He was sensible that he was on the high road to ruin, and occasionally he would form a resolution to quit the degrading practice; but the functions of his stomach had become so much impaired that his

system was not furnished with sufficient stimulus, from food, to support the energies of his mind, and in moments of extreme mental depression, he would again resort to his accustomed drink, and as soon as one glass was taken his resolution was overcome, and he relapsed back into his former habits. Speaking to a friend one day of his anxiety to quit drink, and of his unsuccessful attempts to do so, from the occasional hankering for stimulus, his friend advised him to get some of the Thomsonian composition powder, and when he felt the want of a stimulous to take a dose of the composition. He accordingly obtained the composition and on taking it as directed, it furnished an agreeable stimulus, without disordering the brain; overcome the desire for liquor, and at the same time restored the tone of his stomach to a healthy condition; so that in the course of a year he became changed from drunkeness and wretchedness, and enjoyed perfect health and a fine glow of spirits. He is now actively engaged in the temperance cause and through his example and persuasions others have been induced to resort to the use of the composition powder, with the same happy result.

CASE II.—A merchant of this city who had formerly resided in the south, had contracted the habit of excessive drinking, and was occasionally attacked with mania à potu. Having experienced good effects from vomiting he determined on taking a course of Thomsonian medicine, to have his stomach thoroughly cleansed and then to refrain from the use of strong drink altogether. He stated to me that he had often resolved to quit the degrading practice, but that his spirits sometimes became so much depressed and his appetite so bad, that his resolution to refrain from liquor gave way, and he would again take a glass;—this was soon succeeded by another, and thus he would go on drinking until his stomach turned against it, when he would be attacked with symptoms of mania à potu. After this patient had placed himself under Thomsonian treatment he did not relapse again into his former habits except on two or three occasions, and then a course of medicine was administered, and the general course of treatment adopted that is recommended for mania à potu, which shortened the duration of the disease, and by the daily use of pure stimulants

the digestive powers were finally restored so that the patient was exempt from that state of mental depression, which had so frequently led him to resort to spirituous liquors. This gentleman has continued a sober man during the past two years, and doubtless will continue so.

Case III.—During the summer of 1838, a man called at my office, and gave me the following history of his case. When about the age of thirty he became dyspeptic from close attention to business, and experienced at times extreme lowness of spirits, with trembling of his hands. An acquaintance recommended brandy and water, which he took and experienced temporary relief; continuing to take his glass of brandy and water, whenever he felt the want of a stimulus, he at length found that the dyspepsia was gaining ground, and that the attacks of nervous weakness were more frequent, requiring a more frequent repetition of the brandy; and finally his nervous energy became so prostrate that he was induced to fly to his accustomed stimulus, the first thing in the morning, and to continue under its influence during the whole of the day. It was now sixteen years since he commenced the use of brandy, and (said he) "to speak plainly, I am a confirmed drunkard." He was willing to submit to any course of treatment, that would restore his digestion, so that he could do without the brandy, which he was sensible had gained the upper hand of him. I told him if he was anxious to quit the use of brandy, I had no doubt that he could do it and be restored to health. He placed himself under treatment, which consisted in an occasional course of medicine and the free use of cayenne pepper, more especially at meals, and when he felt the want of his accustomed stimulus to take a dose of No. 6 or of composition. The result was most happy-he quit the use of brandy without much difficulty; his digestion was restored, and he now enjoys good health, not having taken any kind of intoxicating drink during a period of more than two years.

The above are not the only cases of the kind that have occurred under my own immediate observation; I could mention several others of equal interest and importance, where men addicted to drunkenness have become reformed partly through the aid of Thomsonian treatment, which affords a pure stimulus, entirely free from intoxicating properties, and at the same time has the effect to correct and strengthen the digestive functions.

## HEADACHE.

### SECTION LXXXI.

Pain in the head in most instances is occasioned by a disordered condition of the stomach.

Slight attacks of headache may very often be removed by having the head rubbed freely with the hands, which favors the returning circulation from the head. Bathing the forehead with some volatile stimulant, as No. 6, spirits of camphor, or hartshorne, or with simple vinegar, or whisky, will sometimes remove it. When the feet are cold, they should be warmed by the foot bath, or by other means, and the patient take composition or pepper tea. Snuffing composition or No. 6 up the nose by stimulating to excitement the secretions of this organ, will sometimes cure simple headache.

When the pain is violent and not relieved by the means already mentioned, an emetic or the repetition of three or four stimulating injections to relieve the bowels and attract the circulation from the head, will seldom fail of curing the pain.

## SICK HEADACHE.

### SECTION LXXXII.

When there is pain in the head attended by sickness at the stomach with or without vomiting, it is termed sick headache. It always arises from a disordered condition of the stomach; patients almost always experiencing much relief from the pain in the head after free vomiting.

In many instances sick headache occurs periodically; in some the attacks come on every week, in others at intervals of two or three weeks. Persons predisposed to this form of disease are especially liable to an attack, from some change of habit, for instance, missing a regular meal, riding in the cold, or sitting some hours in a crowded assembly. Inaccuracies in diet, fatiguing exercise, exposure to cold, and getting the feet damp, frequently occasion an attack of sick headache.

TREATMENT.—The best remedy for sick headache is an emetic. This taken in the commencement of the attack will not only moderate the symptoms but very generally after the free operation of an emetic all the distressing symptoms will be speedily removed. If the feet be cold apply the warm foot bath or vapor bath and let the patient take a dose of composition or pepper tea before the emetic be given.

INJECTIONS.—I have known sick headache speedily cured by the use of injections alone. Prepared in the usual form of composition or pennyroyal tea, adding a teaspoonful of lobelia, the injections will relieve the pain in the head, and if applied too in the onset of the attack, will never fail of proving beneficial.

In milder cases and when the stomach is not very materially disordered, it may be sufficient that the patient get to bed, drink some warm tea, and have warm applications to the feet.

SLEEP.—When a patient can obtain a few hours sleep, the head-ache is generally cured for the time, whether they have or have

not taken medicine previously. The practice however of taking an emetic in the commencement of sick headache, and repeating it every time that there are symptoms of an approaching attack will not only prove the most effectual means for relieving the symptoms, but if the practice be persevered in, and medicine be taken to strengthen digestion the liability to the attack will be greatly lessened, and in most cases the patient will be freed altogether from the attacks.

BITTER TONICS should be taken once or twice a day, more especially after dinner. Wormwood, centuary, balmony, golden seal, quassia or almost any combination of bitters may be employed. It is the tonic principle that is needed, and it is not important that any one particular article should be employed.

Alkaline Bitters.—Take a handful of wormwood and a table-spoonful of hickory ashes, pour on a pint of boiling water; a wine glass full to be taken after meals, cold. This preparation is applicable in cases of heartburn or sour eructations.

Salt and Vinegar.—A disordered condition of the stomach will in some instances be rectified, and digestion restored, by the use of salt and vinegar. In these cases patients have an inclination for acids.

Costiveness almost universally attends sick headache. The majority of patients take some kind of purgative medicine to remove costiveness, which leaves the bowels in a worse and weaker condition than they were before; the costiveness continues and more physic is taken, and in this way many persons continue this practice for a succession of years until finally the digestive powers become so much weakened, and the functions of the bowels prostrated to such a degree, that without a most careful attention to diet, a natural passage from the bowels is seldom procured. It is indeed doubtful which has done the most injury to the human constitution, the use of purgative medicine or of strong drink. Costiveness is occasioned by a weakened condition of the functions of the bowels; and to assist and strengthen the peristaltic action of the bowels, and excite the secretions of their mucous membrane are the essential indications for the cure of habitual costiveness. In many instances this may be effected by the daily use of bread

made of unbolted wheat flour, or by taking every evening for supper a gruel or mush made of the same material, and avoiding the use of cathartics. The bran is supposed to act as a mechanical stimulus. Where costiveness is attended by heart burn or sour eructations, finely pulverized charcoal will be found especially beneficial; purified charcoal should be used when it can be obtained. The dose is a large teaspoonful taken in composition or spiced bitter tea, or it may be taken in boiled milk. It should be taken an hour or two before meals.

Capsicum taken freely at meals, or immediately after, will stimulate the action of the bowels, and, in many cases of constipation, will be sufficient to overcome it.

INJECTIONS.—Where the use of purgative medicine has been continued for a succession of years, it may be necessary, besides the means above mentioned, to assist the bowels occasionally by the use of the syringe. There is probably not a case of obstinate constipation of the bowels, in which the mucous membrane of the bowels is not coated with thickened secretions, forming a complete false membrane, which occasionally passes off in long pieces somewhat resembling an intestine. The removal of this false coating from the mucous membrane of the bowels is essential to the restoration of their natural functions. Purgative medicines operate upon the bowels as a foreign substance—something not congenial: and provoke an action, an effort to cast off the offending substance. causing the mucous surfaces to throw out a coating of thickened secretions, to shield them from the deleterious impression of the cathartic; therefore cathartics, instead of cleansing the bowels of "canker," as Dr. Thomson expresses it, give the canker a deeper hold, and thus adds to the difficulty. That which is required for cleansing the lining membrane of thickened morbid secretions or canker, is to excite the bowels by pure stimulants, capsicum, composition, and compound lobelia pills, and the use of stimulating and astringent injections.

Patients subject to attacks of sick headache should use the precaution to dress very warmly whenever they ride out in cold or damp weather. With regard to headache being occasioned by getting the feet damp, too few persons in the community are fully sensible of the influence which dampness, applied to the feet, excites over the digestive functions, and of the extent of derangement which it frequently occasions.

Another Variety of Headache.—Severe pain in the fore-head and eye balls, is sometimes occasioned by disease of the frontal sinuses which are small cavities in the bones of the skull, immediately above the eye brows. These small cavities are lined with a mucous membrane which is continuous with the mucous membrane of the nose. The disease is occasioned by taking cold; and prevails during the cold and damp weather of spring and autumn. The disease is in no wise dangerous, but sometimes continues several days, and occasionally for weeks, before the pain is removed. In the first place the mucous membrane is weakened by the influence of cold, inflammation ensues which terminates in the free secretion of a thick, yellow or greenish matter, which is discharged by the nostrils and then the pain usually subsides.

TREATMENT.—Besides constitutional treatment, such as taking freely of warm stimulating teas to favor perspiration, benefit will be derived from breathing through the nose the vapor of vinegar and water, and using the composition powder or cayenne pepper as a snuff, which will excite the secretions, and in this way afford relief.

Not unfrequently is this form of headache accompanied with a deranged condition of the system generally, the affection in the head being a mere branch of disease, the root of which is in the stomach and bowels. Hence in violent cases of headache accompanied with symptoms indicating a disordered condition of the stomach and bowels,—a furred tongue, loss of appetite, bad taste in the mouth, costive bowels, and chilliness, and flashes of heat,—the system must be warmed by the use of stimulants internally; and external warmth applied, either by warm bricks placed around the patient or a vapor bath administered, followed by an emetic to cleanse the stomach, and if the bowels require assistance let it be done by enemas. After this the patient may take occasionally of some stimulant—composition, spice bitters, ginger, or simple herb teas, and avoid exposure to the cold or dampness.

I have never known a case of headache that was not either cured or greatly relieved by a vapor bath and emetic.

## TOOTHACHE.

### SECTION LXXXIII.

The curableness of toothache by local applications, depends greatly upon the condition of the tooth and the cause of the pain. Thus if the tooth be hollowed, and the pain arise from the presence of acrid matter in the decayed part, or from exposure of the nerve to cold, the pain may be greatly relieved by filling the hollow of the tooth with cotton wet with the third preparation of lobelia, oil of cloves, spirits of hartshorn, No. 6, or spirits of camphor, together with warm applications to the cheek, such as bags of hot ashes, salt or sand, or a towel folded up and applied as hot as can be borne. When a dry heat does not answer the purpose, a small bag of hops or of bitter herbs dampened with vinegar, or cloths wrung out of hot water may be applied.

Toothache may be cured in many instances, by placing the feet in warm water, and taking freely of composition or pepper tea. In violent cases an emetic should be given, followed by broken doses of lobelia; stimulating teas and warm applications to the feet. A very intelligent and experienced Thomsonian once told me that he generally prescribed a dose of the third preparation of lobelia for the toothache, and said that it seldom failed of removing the pain.

It very often happens that an abscess forms at the extremity of the root of a tooth, which finally swells out the gum, forming what is commonly called a gum bile. External applications are seldom of permanent benefit in such cases; the only certain cure is the extraction of the tooth. After the abscess discharges, the pain generally vanishes. When a tooth has become diseased at its root, it will most probably be a frequent source of annoyance as long as it remains in the jaw, as plugging will seldom answer any good purpose in such cases.

Whenever teeth begin to decay externally they should be plugged by a dentist well acquainted with the business. Persons residing in the country are too apt to neglect their teeth when they begin to decay, and do not apply to a dentist until they experience the disadvantage of the loss of some of their teeth, and the partial decay of others. A skillful dentist can generally prevent the further decay of a tooth if timely applied to. Although the teeth may be preserved by plugging them, yet they are often ruined by too much filing. Dentistry, like the Thomsonian system, has been greatly abused by quacks, who have engaged in it without being acquainted with its principles. A dentist properly acquainted with his profession will be very cautious how he uses the file, knowing as he does the importance of preserving the enamel of teeth, and of the liability of a rapid decay of them when a portion of the enamel is destroyed. I have known individuals condemn dentistry altogether, because they have observed their teeth to decay more rapidly after having them filed. It is quackery in dentistry that should be condemned, and not the principles of the science. There is scarcely a branch of science the principles of which can be more plainly demonstrated, than that of dentistry.

Having made allusion to *Thomsonian quacks* I will explain myself; not meaning to be understood as applying this term to every one who engages in the practice without having had a regular medical education; indeed, some of the most successful practitioners that I have ever yet known, have been men without a regular medical education, who have established a correct method of reasoning upon things in general, and possessing good common sense, were able to comprehend the true principles of Thomsonism by reading the works of its founder, and possessing sufficient moral courage to pursue the treatment thoroughly and perseveringly, as their mature judgment dictated, uninfluenced by the slander of gossips, the opposition of the prejudiced, or the timidity of professed friends. I would apply the term quack to

one (whether he have been educated in a college or on a farm) who, announcing himself a *Thomsonian doctor*, and railing against all mineral poisons, employs mandrake and other vegetable poisons, and deleterious compounds, as improvements on the Thomsonian system; and who, instead of being governed in his practice by the general principles of the Thomsonian system, employs inefficient syrups, and worse than useless cathartics, in the place of Thomsonian medicine. Such practitioners may very properly be termed quacks in medicine.

# EARACHE.

## SECTION LXXXIV.

This distressing complaint is of frequent occurrence. It prevails most in early life.

Causes.—Pain in the ear is generally a consequence of exposure to cold and dampness. Those who are predisposed to this form of disease, are extremely liable to an attack by getting their feet damp. Children are peculiarly liable to a discharge of matter from the ear, and they generally suffer more or less pain for several days before the ear begins to discharge, attended with a flushed countenance and some degree of fever.

TREATMENT.—When earache is caused by cold, it may be relieved by steaming the side of the head and using the warm foot bath. Steam may be applied to the ear through a funnel placed over a vessel containing boiling water. If there should not be sufficient steam, a small hot stone should be put in the water. After the steaming, a portion of cotton wet with the tincture of lobelia, should be kept in the ear, or dry cotton may be employed if the tincture cannot be readily obtained. The heart of a roasted onion put in the ear will sometimes relieve earache; it should be hot, or as warm as can be borne. If there should be an abscess

forming, the same course of treatment may be pursued; or apply a warm poultiee to the ear, with a view to hasten a discharge of the matter. Syringing the ear with warm soap suds will sometimes relieve the pain.

If the system be much disordered, an emetic will be beneficial, after which broken doses of lobelia may be given in order to eause a moderate degree of relaxation of the system, and to equalize the nervous influence.

Case.—A little girl of serofulous constitution, who had been subject to a running from her ear, was attacked with violent pain in the ear and side of the head, attended with an extremely offensive discharge from this organ. A variety of local remedies were employed without any apparent benefit. After having suffered continued pain for two days and nights, a full course of medicine was administered, which afforded complete relief. After the course small doses of the tineture of lobelia were given every two or three hours, and about the fourth of a teaspoonful of green lobelia was administered by enema, whenever there was a return of the pain, which gave immediate relief, and enabled the patient to sleep.

## RUNNING OF THE EARS.

## SECTION LXXXV.

A discharge of matter from the ears is by no means uncommon in children. Those of a scrofulous constitution are more liable to it, still it is often observed in children who are not predisposed to scrofula.

This disease occasionally injures the hearing, though more commonly it is not attended by any permanent injury to the hearing, even though the discharge continue at intervals during a period of several years.

The running in many instances is from the parts immediately below the cavity of the ear. In the first place a small abscess is formed near the eavity of the ear, and breaks into it and is thus discharged. In other instances the disease is confined to the membrane lining the cavity and drum of the ear.

TREATMENT.—When a child of a weak and delieate constitution is affected with running from the ear, a permanent cure is rarely accomplished until the general health be improved. It is therefore of more importance in such cases to use means for improving the constitutional health, than to depend upon any applications to the ear.

There are no means so effectual for improving the health as an oceasional emetic, or a full course of medicine. If the tongue be coated, a strong tea of bayberry must be given once or twice a day, or in place of this use the No. 3 pills.

Pipsissawa.—A strong tea or syrup of pipsissawa, may be used with benefit in this and other forms of disease in children, more especially in scrofulous eruptions.

Yellow dock, sarsaparilla, and guiac shavings, combined in equal portions, simmered an hour, and then strained, sufficient sugar added to form a syrup, and then simmered again, forms a useful syrup in all cases of running sores in children, more particularly in eases where the disease has been of long continuance. The dose of the syrup is from a tablespoonful to a wineglassful, according to the age of the patient.

Tonics.—When the discharge is profuse and the patient debilitated, the spice bitters or some other form of tonic must be employed, unless the syrup above mentioned be given.

Local Applications.—Syringing the ear with eastile soap and water, or with a strong tea of bayberry, will be beneficial. A strong tea made by steeping in boiling water a compound of bayberry, aspen poplar bark and gum myrrh, will not only serve to cleanse the parts, but will strengthen the healing efforts of nature. Many persons doubt the propriety of syringing the ears with stimulating teas, supposing that they may be earried into the head. The drum of the ear, which is not more than an inch and a half from the external opening of the ear, forms a barrier to the pas-

sage of substances beyond it; neither is there any danger from dropping stimulants, such as No. 6, into the ear.

When the discharge has been long continued, No. 6 alone, or combined with about an equal quantity of bayberry or poplar bark tea, should be dropped into the ear two or three times a day, or if this be very painful, a simple tea of myrrh may be used, either of its usual strength or diluted with water or bayberry tea.

In some instances the matter discharged is so acrid that it excoriates the ear, causing the surface of it and the parts below the ear to be continually sore and inflamed; the glands back of the ears and on the side of the neck are apt to be more or less swollen; and sometimes an eruption appears over part of the head and face, which very often continues for weeks, and sometimes it requires several months for the eruption to be entirely cured. Where the external ear becomes excoriated, or sores break out on the skin, the parts must be kept from the air by the application of tar ointment, or some kind of adhesive salve, in order to protect the raw surface from the atmosphere. Apart from constitutional treatment, there is nothing of more importance in the cure of eruptions, of the character above mentioned, than to protect the parts from the action of the air, it does not make much difference what kind of salve or ointment is used, provided it will effectually exclude the air. In most instances, the parts suppurate and discharge freely soon after applying a salve or ointment, but by continuing the application, so as to keep off the air, the parts will soon heal, unless the system be much diseased, and the healing powers of the constitution thereby enfeebled. When the parts suppurate freely, the ointment or salve will of course require to be removed daily, in order to cleanse the parts, but the exposure should not be continued longer than is necessary to dress the sores. Such eruptions should never be dried up by the application of lead water, or driven into the system by the use of salts, or other such cooling medicines. For although they might not be followed by immediately bad effects, yet serious consequences have often resulted by applying lead water, or a solution of corrosive sublimate, to eruptions on the face and head; and by drawing the determining powers from the surface by purging. Hence some physicians advise parents to use no means to cure eruptions about their children's heads, considering the eruption as a safeguard against internal disease that might prove of far more serious consequence. I have never known any bad effects to arise from curing eruptions about the head upon the Thomsonian plan. The internal remedies used for curing the disease will also prevent it from seating itself in the system.

## DEAFNESS.

#### SECTION LXXXVI.

Deafness may depend upon palsy or other diseased condition of the nerve of hearing; from thickening of the drum of the ear, or it may proceed from disease of other parts of the internal apparatus of the ear. Hardness of hearing sometimes depends upon a collection of hardened wax in the drum of the ear.

Complete deafness is very rarely cured. When hardness of hearing is occasioned by indurated wax in the ear, it is very readily remedied by syringing the ear with warm soap suds, made of castile or palm soap. A convenient way to syringe the ear is to have the warm suds in a basin with one edge of it placed against the neck, immediately below the ear, and inject the liquid into the ear, with sufficient force to reach the farther extremity of the cavity. The syringing to be continued until the wax softens and is washed out.

# PALPITATION OF THE HEART.

## SECTION LXXXVII.

An irregular beating, and fluttering motion of the heart, very frequently attends dyspepsia, sick headache, neuralgia, asthma, consumption, hysteria, gout, constitutional debility, and in persons

of nervous temperament, it is frequently occasioned by any slight derangement in the system. The use of strong coffee, tobacco, an oppressed condition of the stomach from food that is hard of digestion, grief, anxiety or any sudden emotion of the mind will in some, occasion irregular throbbing and fluttering motions of the heart.

Of all the cases of irregular palpitations of the heart, there is probably in nine of every ten of them, no disease of the heart; the irregularity of the motions of the heart being caused by a weakness and derangement in the nervous system. A disordered state of the stomach weakens the nervous power, and the weakened condition of the nervous influence, may occasion disorder of the functions of the heart, constituting what is termed a functional disease of the heart. Thus sick headache and palpitation of the heart are often associated; both arising from the same cause.

TREATMENT.—Palpitation of the heart being in most instances merely a symptom of disease, the original seat or cause of which is generally a disordered condition of the stomach, it does not demand any especial treatment, apart from that which is required for correcting the disordered condition of the stomach, and restoring digestion. Thus a patient may have an attack of hysteria, accompanied with violent pain in the head, and palpitation of the heart—these being mere symptoms arising from constitutional disease, the seat of which is commonly in the stomach, the same course of treatment will be sufficient to remove all these different symptoms. If ten thousand persons were to become diseased from one general cause, there would probably not be two cases in which all the symptons of disease would be precisely alike. Whilst in one there might be sick headache with palpitation of the heart, another might have palpitation of the heart without sick headache, and another sick headache without their regular throbbings of the heart. Asthma in one would be accompanied with fluttering of the heart, in another it would be accompanied with headache alone, whilst the majority would probably be exempt from any functional derangement of this organ. Disease of every variety is produced by a weakened condition of the principle of life, and notwithstanding the great diversity in the symptoms which

are presented in the various forms of disease the general indications of treatment are few, and the necessary remedies also are few and simple.

If palpitation of the heart be accompanied with manifest symptoms of a foul stomach, an emetic will be the best remedy; which should be preceded by the vapor, or the warm foot bath.

When irregular palpitation of the heart becomes of so frequent occurrence as to need especial attention, the indications of cure, are, to restore the natural balance of the circulation of the blood, to cleanse the stomach and bowels of "canker" and strengthen digestion. This will prevent the heart from becoming permanently diseased in its structure; a circumstance which sometimes occurs in consequence of long continued palpitation of the heart depending upon constitutional disorder, and general debility.

Persons of full habit of body, whose digestive powers are enfeebled by a long continued course of excesses in eating and drinking, and the inordinate use of tobacco, are very liable in advanced life to frequent attacks of strong, irregular throbbing, and tremulous motions of the heart. I knew an instance where a gentleman was confined to the house several months laboring under symptoms of disease of the heart, yet by the free use of Thomsonian remedies, consisting chiefly of capsicum, a compound of the astringent or anti-canker medicines and bitters, he recovered perfectly from all symptoms of this disease.

Palpitation of the heart sometimes depends upon a weakness and soreness in some portion of the spine, the stomach not being materially disordered. Here it will be proper to employ the vapor and shower bath, stimulating applications to the spine, together with such constitutional treatment as the condition of the general health may demand.

# ORGANIC, OR STRUCTURAL DISEASE OF THE HEART.

#### SECTION LXXXVIII.

The preceding section treats of functional derangement of the heart, unattended with a change in the structure of the heart itself. Under the present head I shall make some brief observations in relation to structural disease of the heart, and point out the appropriate treatment.

The heart, like other organs of the body, is liable to changes of structure, such as an enlargement of its dimensions, with unusual thinness of its walls, enlargement of the ventricles of the heart, disease of the valves, the formation of cartilage within its cavity, &c., all of which depend originally upon a disordered condition of the system, or upon an originally feeble organization. Violent mental emotions have been observed to cause disease of the heart. Instances have occurred in which sudden terror, anger, or excessive joy, has determined the blood so vehemently to the heart as to cause immediate rupture of its ventricles."

Of the Symptoms.—Many of the symptoms which attend disease of the heart, also accompany other forms of disease, so that even experienced physicians sometimes find it difficult to distinguish disease of the heart from mere sympathetic derangement.

Asthma is very frequently attended by palpitation of the heart; and again, structural disease of the heart is accompanied by difficult respiration resembling asthma. Patients affected with disease of the heart experience great oppression and difficulty of breathing on using exercise; the same symptoms attend on asthma and dropsy of the chest; and even when patients are extremely feeble, and without being affected either with asthma, dropsy, or disease of the heart, they are liable to experience great oppression in the chest, difficulty of breathing, and violent palpitation of the heart from over exertion. The livid line of the lips observed in cases of heart disease, alike accompanies paroxysms of asthma. The ina-

bility to lie down, however, only continues during a paroxysm of asthma; whereas in disease of the heart it is generally continued, or at least the patient can seldom lie on the right side, with the head on a level with the body; the same, however, attends hydrothorax. The pulse which is irregular in structural disease of the heart, is also intermitting in functional disease of the heart, and also in other varieties of disease. Alarming dreams and sudden starting during sleep, with a distressing sense of suffocation which are mentioned among the symptoms attending disease of the heart, are by no means peculiar to that form of disease alone.

"When we find a patient complain of more or less habitual dyspnœa," (difficulty of breathing) "greatly aggravated by corporeal exertion; slight œdema, (dropsical swelling) of the feet: a puffy and anxious appearance of the countenance, with a livid hue of the lips; frequent palpitations or tremulous action of the heart during the paroxysms of dyspnæa; the occasional sudden occurrence of an elastic puffy swelling of the lower eye-lids and the upper lip; an irrascible temper; quick and short inspirations; a deep purple and bloated aspect of the face during the paroxysms of difficult breathing; with an absence of the peculiar wheezing and rattling noise in the lungs; and a free secretion of urine: when these symptoms are noticed, we have strong reasons for presuming that there exists some disease of the heart."—Eberle.

Difficulty of Cure.—The majority of cases of confirmed structural disease of the heart, are probably incurable; yet by especial care on the part of patients to avoid excesses of eating, drinking, exercise, &c., together with the employment of means to support the natural warmth of the body, by which the determining powers will be kept to the surface, and the blood caused to flow to the extremities, and thus be prevented from being confined to the internal vessels crowding upon and oppressing the heart, the symptoms may be much relieved, and in some instances cures have been effected even when the disease had assumed a very serious character. When death takes place from disease of the heart, it is generally very suddenly, and sometimes without any previous symptoms indicative of more than usual danger.

TREATMENT.—An important indication in the treatment of dis-

ease of the heart, is to maintain an equal circulation of blood throughout the system. The means to be employed are the warm foot bath, the vapor bath, pure stimulants taken into the stomaeh, stimulating enemas, frictions of the surface, stimulating liniments, or embrocations applied to the extremities, and lastly, yet of still greater importance, the administration of an occasional course of medicine. The continued use of broken doses of tineture of lobelia will prove beneficial. If the system be in a relaxed condition, and the complexion pale, bitters must also be employed.

Case.—A young man by the name of Bulloek, who was laboring under disease of the heart, of a severe character, the throbbings of the heart being constantly violent and irregular, and his flesh much wasted. The physician who attended him was a man of eonsiderable eminence in the profession, and declared the ease to be an ineurable disease of the heart. It was proposed to the physician that the patient be taken to the country. He replied that it would be altogether useless, as the disease was of that eharaeter which afforded no grounds for hope of recovery. Under these discouraging eircumstances, the patient was taken to a Thomsonian infirmary, which was under the superintendence of Frederick Plumer, and there he had a course of medicine administered to him every few days. Under this treatment he improved so much, that after the twentieth course of medicine was given, he was almost free from symptoms of disease of the heart. This gentleman subsequently regained perfect health, and engaged in the study of law, and now resides in one of the Southern States.

In another instance, a gentleman of my acquaintance, past his fiftieth year, who had been a *full liver*, was confined to the house several months with well marked symptoms of disease of the heart. By a careful avoidance of all injurious influences, and the continued daily use of Thomsonian remedies, this patient became entirely free from symptoms of the heart disease, his general health being fully restored.

The above are the only cases of disease of the heart, (admitting them to have been of that character,) in which to my knowledge the effects of a persevering and well applied course of Thomsonian treatment in this disease has been fully tested. The tendency of

Thomsonian treatment in equalizing the circulation, and improving the general health, and the remarkable influence of lobelia in equalizing nervous energy, even when administered in small doses, affords sufficient ground to warrant confidence in the practice, even though the disease may heretofore have baffied the treatment pursued by the medical profession.

Excesses of every kind to be avoided.—Persons laboring under disease of the heart cannot observe too much caution, in the avoiding of excesses, in eating, drinking, and in exercise. If the stomach be oppressed with too much food, or by the food being hard of digestion, it will more or less disturb the equilibrium of the circulation of the blood, and thus increase the disturbance in the regular action of the heart. Much the same effects will be produced by exposing the feet to dampness which causes the blood to recede from the surface and oppress the heart. Too much exercise is apt to occasion great distress at the heart, with violent palpitations.

Many persons may question the propricty of administering a course of medicine to a patient laboring under disease of the heart. Experience has proved, however, that a patient affected with disease of the heart, who is unable to walk a square, without experiencing the greatest distress and difficulty of breathing, will go through a full course of medicine without affecting him in this way, to any considerable degree. During the winter of '38, I was requested to visit a patient (a Mr. Kates) who was laboring under a most severe form of disease of the heart. The case was utterly hopeless of cure; his legs were dropsical, requiring to be punctured every few days to draw off the fluid; there was an accumulation of water in the cavity of the abdomen: he was extremely emaciated, and the action of the heart continually violent, laboring, and irregular, so that it was with difficulty that he could walk a few steps without support, and he was compelled to continue night and day in a sitting posture. I commenced treating the case with the view only of affording relief, and after applying the steam bath daily, which he bore very well, and having taken composition tea, occasionally, three or four days, I administered a full course of medicine, and did not perceive any unusual excitement or increased difficulty of breathing during the operation, not even immediately after vomiting. This circumstance admits of a ready explanation, namely: the means employed equalized the circulation of the blood, and thus prevented it from crowding upon the heart. Thus a patient laboring under a paroxysm of asthma, who is unable to walk across a room, or scarcely to stand erect, will be materially, if not entirely relieved by a thorough emetic, and still more certainly by a full course of medicine.

I attended a patient living in Woodbury, N. J., a man in advanced life, laboring under a most severe form of asthma, attended with well marked symptoms of organic disease of the heart. It was with difficulty this patient could walk ten feet, and he had not lain down during a period of twelve months. Every extra effort would cause violent throbbing and distress at the heart, still this patient would go through a course of medicine and feel much relieved during the operation. The course of treatment adopted in this case, which consisted chiefly of the free use of the third preparation of lobelia, given in a strong decoction of bayberry and sumac berries, repeating the dose whenever the symptoms of oppression were more distressing, together with the daily application of the vapor bath, warmth to the feet, the use of injections, and stimulating liniment to the surface, not only removed the asthma, but so far restored the natural action of the heart that the patient in a few weeks after the commencement of the treatment, was able to walk a mile, without experiencing much inconvenience from the exercise.

The same course of treatment that is adapted to the cure of asthma, is precisely that which is required in disease of the heart or dropsy of the chest, so that however diffidult it may be to decide the precise character, form or location of the disease, the indications of treatment are, to equalize the circulation, restore the natural warmth of the system, cleanse the stomach by emetics, the bowels by enemas, and strengthen digestion. A physician by long experience in the use of the stethoscope, may be enabled to form a very accurate opinion in relation to diseases of the heart. This kind of knowledge, however, does not teach us how to cure

disease. A man may be a perfect anatomist, and yet be a very unsuccessful practitioner. A knowledge of the construction of the human system, and a knowledge of the laws of life are so distinct, that the one may be understood, without any correct knowledge of the other.

# BLEEDING FROM THE LUNGS.

#### SECTION LXXXIX.

Raising blood from the lungs occurs under various conditions of them, and although it generally occasions alarm, it is not always attended with danger. Though generally connected with pulmonary consumption or with a predisposition to that disease, still frequent instances have occurred where persons have been subject to bleeding from the lungs, for many years, without much inconvenience; and, occasionally persons live to an advanced age who have been subject to these frequent discharges of blood.

The opinion so generally prevailing, that bleeding from the lungs is always caused by the rupture of a blood vessel is erroneous. Still this does occasionally happen, in the advanced stage of consumption in consequence of ulceration of the vessels. But in the great majority of instances the blood oozes through the infinitely small vessels which terminate on the lining membrane of the air passages; these vessels being in a relaxed, or otherwise diseased condition, are unable to resist the pressure of blood upon them. The same occurs in the lining membrane of the nose: the blood escapes from the mouths of the vessels without their being ruptured. The quantity of blood discharged varies greatly in different individuals; and, also at different periods, in the same patient.

A free discharge of blood from the lungs is usually preceded by coldness of the extremities; a sensation of tightness and oppres-

sion at the breast; distress at the pit of the stomach; palpitation of the heart; chilliness; agitation of mind; "alternate paleness and flushing of the face; and often a disagreeable salty or sweetish taste in the mouth."

To distinguish bleeding from the lungs, from bleeding from the stomach: observe that where blood is *vomited* it comes from the stomach; and when raised by hawking or coughing it is from the lungs.

Causes.—Bleeding from the lungs may arise from various causes, such as the presence of tubercles in the lungs; exposure to cold and dampness; over-exertion; disordered stomach; "the suppression of habitual evacuations, and obstruction in the liver, or spleen."

RARELY PROVES FATAL.—Patients seldom die of bleeding from the lungs; for although the bleeding may be profuse, it is seldom so great as to endanger life. Frequent copious bleeding from the lungs, however, may occasion such a degree of debility and coldness of the system, that dropsy, consumption, or marasmus, will ensue, and which may prove incurable.

TREATMENT.—The important indications for checking the escape of blood from the lungs, is to equalize its circulation throughout the system. An undue accumulation of blood in the lungs is always attended by a corresponding deficiency in other parts.

In cases of slight bleeding, placing the feet in water as hot as can be borne and drinking freely of hot composition tea to excite perspiration, and assist in equalizing the circulation, may be sufficient to check the bleeding. But where this is not sufficient, a full course of medicine administered will prove the surest means of equalizing the circulation. If the patient be very feeble hot bricks wrapt in damp cloths may be kept at the feet, in place of the vapor bath; and a prompt emetic given. I have never witnessed a case in which bleeding from the lungs continued, after the free operation of an emetic. The lobelia should be given freely, not only with the view to produce free vomiting but also to relax the system. Stimulating injections containing lobelia, are especially beneficial, by the influence which they exert in determining the blood from the lungs. The patient must be kept quiet as pos-

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sible, and avoid conversation. After the bleeding is checked, the warm application to the feet should be continued, together with an occasional dose of composition to maintain an equilibrium in the circulation; and if the patient be feverish or restless, add such a portion of the tincture of lobelia to the composition as will merely occasion slight nausea. Bayberry and sumac berries steeped in boiling water make a very strong tea, adding a portion of cayenne, sweetened, and drank freely, will be as effectual a remedy as can be taken, excepting the emetic. Professor Chapman, in his lectures, relates the circumstance of his being called to attend a young man who was bleeding freely from the lungs, and as the doctor entered the room the patient vomited in consequence of a large dose of medicine that he had just taken and the bleeding immediately ceased. The fact of the hemorrhage from the lungs ceasing when the patient vomited, together with the conviction that it admitted an easy explanation, induced the doctor to make a trial of emetics in similar eases. Accordingly, in the next case that came under his care, which was that of a young woman who was bleeding profusely, and the usual means, salt and acetate of lead, having failed, an emetic of ippicacuanha was given, which produced active vomiting, and the bleeding immediately ceased. The next case of the kind was that of a young woman who had been subject to raising blood, in consequence of suppression of menses. The usual remedies having also failed, the doctor resorted to an emetic, and with entire success; not only did the emetic cheek the flow of blood from the lungs, but it removed the obstruction which occasioned the bleeding. Dr. Chapman declares that more than thirty years experience has convinced him that emetics are the most effectual means for ehecking bleeding from the lungs-rarely ever failing, and no danger attending the operation, when under the direction of a judicious practitioner.

In the advanced stage of consumption, or when there is extreme prostration of strength, the patient should not be subjected to over exertion, either by getting up, or by conversation. It is in cases unconnected with deep consumption, that a thorough course of treatment will be more appropriate.

Persons not in deep consumption who are liable to attacks of

raising blood from the lungs, by taking an emetic or a full course of medicine, as soon as there are symptoms which indicate approaching hemorrhage, it will in almost every instance prevent the bleeding; and this will not only be a means of preventing hemorrhage at the time, but will also prove the most effectual means of restoring the general health, and thus remove the predisposition to raising blood.

Common table salt is a remedy generally resorted to for spitting blood, which, together with placing the feet in warm water, will

sometimes be successful in stopping the bleeding.

In bleeding from the stomach I have found emetics to be successful in cheeking the hemorrhage. When the stomach is distended by an accumulation of blood, or other substances, the bleeding may continue until the stomach is relieved of its oppression, by a prompt emetic, and stimulants given to excite it to contract. On several occasions I have administered the liquid of the third preparation of lobelia in a strong decoction of the bayberry, or sumac, which has invariably succeeded in eheeking the bleeding after vomiting has occurred. The vapor bath and injections to the bowels are as much indicated in bleeding from the stomach as in hemorrhage from the lungs.

# EPISTAXIS.

## SECTION XC.

(BLEEDING FROM THE NOSE.)

BLEEDING from the nose as it usually occurs in young and healthy persons, or where it is caused by slight injuries, does not require particular attention. Confirmed into a habit, however, it is hable to bring on disease of the lungs, by its draining the system of so much blood.

Bleeding from the nose often takes place during the active

stage of fever, and more especially when it is attended with great fullness of the head.

From the frequent occurrence, also, of bleeding from the nose about the turn of fever, it is considered by many as a crisis symptom, and has been cited as an argument in favor of bloodletting in fever; but it should be recollected that the escape of blood from the nose is the *effect* and not the *cause* of the favorable change in the disease; the vessels of the mucous membrane of the nose being debilitated by disease, are unable to resist the force of the circulation, when it is restored to these parts by the increase of vital power.

Bleeding from the nose occurs in a condition of the system the opposite of that above mentioned, namely: in the sinking stage of malignant diseases, as typhus and yellow fever; the blood apparently becoming dissolved and deprived of its tenuity, escapes from the vessels, they having lost their power of contraction. This is an unfavorable occurrence, as it tends to reduce the already enfeebled strength of the patient.

Occasionally bleeding from the nose assumes a serious aspect, where it occurs in aged persons, and where there exists extensive derangement in some important organ, as the stomach, liver, spleen, &c., sometimes proving, under such circumstances, extremely difficult of control.

Enormous quantities of blood are sometimes lost from the nose. From five to eighteen, and even thirty pounds, have, in some instances, been lost in a few days. The bleeding, it is said, always ceases when the patient faints.

TREATMENT.—Persons predisposed to bleeding from the nose should be careful to avoid all exciting causes, as exposure to cold, especially cold damp feet, heavy lifting, stooping with the head low, hot stove rooms, &c.

The indications of treatment in this are the same as in bleeding from the lungs, namely: to equalize the circulation, and give tone to the vessels from which the bleeding proceeds.

In its milder form, and where remedial means are deemed necessary, placing the feet in warm water, bathing the face in cold vinegar and water, or whisky and water, and taking a dose

or two of composition or pepper tea, will be sufficient. Stimulating injections, containing a portion of lobelia, will always be found beneficial, and in obstinate cases almost indispensable.

Pressing the sides of the nose together with the thumb and finger, opposite the bleeding vessels, will in common cases prove effectual, provided the pressure be continued a sufficient length of time to allow the blood to coagulate and block up the vessels.

If the pressure be made below the bleeding vessels, the blood will pass down the nostrils into the throat, the hemorrhage not being checked.

In cases of a more obstinate character, depending upon extensive derangement of the general health, or where it has become a confirmed habit, a course of medicine should be repeated at proper intervals, together with proper intermediate treatment, with injections, and the usual means employed by Thomsonians for improving the health.

The following is from Dr. Samuel Thomson's narrative:—
"While at Exeter, I had a case of a young man, son of Col. N.
Gilman, who was in a decline. He was about fourteen years old, and had been troubled with bleeding at the nose. They had made use of such powerful astringents, with corrosive sublimate snuffed up the nose, that the blood vessels in that part seemed to be shrunk up, and his flesh much wasted away; I carried him through a course of medicine, which caused an equal circulation of blood throughout his body, then raised a natural perspiration, and restored the digestive powers so as to support the body with food instead of medicine. The bleeding from the nose ceased, and in a short time he recovered his health."

When bleeding from the nose occurs in an exhausted state of the system, with cool skin, flesh soft and flabby, and the countenance pale, besides the employment of means for equalizing the circulation of the blood, stimulating and astringent applications should be made to the bleeding vessels to excite them to contraction. No. 6, or the third preparation of lobelia, adding a portion of bayberry, may be introduced into the nose by means of a piece of cotton and a probe.

BURNED CORK .- It is said that a quill filled with the ashes of

burned cork, and the ashes blown into the nostril immediately after cleaning out the clotted blood, has succeeded in arresting bleeding from the nose in some very obstinate cases.

Spirits of Turpentine.—When bleeding from the nose occurs in what is termed typhus fever, the following is a good remedy: A teaspoonful of spirits of turpentine, beat up with the yolk of an egg, and a teaspoonful of this given at a time to the patient, repeating every ten or fifteen minutes. Occurring, however, in the sinking stage of malignant forms of disease, when the blood has become apparently dissolved or deprived of its fibrin, but little benefit is to be anticipated from any remedy.

# BLEEDING FROM WOUNDS.

#### SECTION XCI.

Cuts made by a sharp edged instrument bleed more than wounds of the same or even much greater extent, made by a rough edged instrument, a saw for instance, or when with the cut the parts are much bruised.

Nature's method for stopping the flow of blood.—When an artery or vein is divided, the surface of the inner coat of the vessel commences, throwing out a gluey substance which gradually fills up the cavity of the vessel, and prevents the further escape of blood. In this way the cavity of the vessel becomes gradually filled, so that in the course of half an hour an artery or vein the size of a small crow quill may entirely cease to bleed. When a vessel is torn or bruised, its cavity becomes closed much sooner than when it is cut with a smooth instrument. Lacerated wounds seldom bleed long; and sometimes very extensive wounds of this kind are attended by very little bleeding from the commencement, even when large vessels are torn asunder.

Wounds about the extremities, or in any part where the vessels are not larger than a crow quill, seldom requires the vessels to be

taken up and tied, as the vessel will become plugged up in the manner above described, without any serious loss of blood, provided advantage be taken of position, and pressure used.

Position.—In wounds of the extremities, for instance on the hand or arm, that bleed freely, the parts should be held above the head; or, if on the foot or leg, the patient should lie down and have the limb raised higher than the body.

Pressure.—Much may be done by pressure in arresting bleeding, more especially where the cut vessel is situated in bony parts, for here the pressure will be more effectual. Pressure may be made by a piece of sponge, or a compress of folded cloths held or bound firmly upon the parts, until the bleeding ceases.

When an artery is cut the blood will be thrown out in jets and its color will be red; whereas when a vein is cut dark blood is discharged.

Large veins may be checked from bleeding freely, by applying firm pressure on the vein above and below the wound. There is more or less danger to be apprehended from tying a vein; this, therefore, is to be avoided, unless the vein be large and the bleeding cannot be checked by other means.

Large arteries that are cut require a ligature, unless the bleeding should not be very profuse. A person in full health may lose large quantities of blood, and soon have this loss restored, provided his digestion be not destroyed by the loss of blood; whereas, in disease where the digestive functions are prostrated, the loss will not be restored for a much greater length of time, for new blood cannot be formed without chyle, and chyle is formed from food that is passing through the process of digestion.

Vessels on the head seldom require tying, as pressure can be effectually made upon them in consequence of the vessel lying near the bones of the head. Tying the vessels on the head is also apt to be followed by erysipelas, provided the parts have been bruised unless great care be taken to protect the parts from the air.

An artery that is only partly cut off will bleed much longer than when it is completely divided. Hence when it is ascertained that a vessel is partly divided, it should be entirely severed, which will enable the ends of the bleeding vessel to contract and retract and to become filled up by the lymph which exudes from the inner coat of the vessel. If an artery or vein be partly divided only, it will be difficult for the vessel to become filled with lymph, so that even a small artery that is partly cut in two may continue to bleed a long time. The only means of ascertaining whether a vessel be partly divided, is by searching at the bottom of the wound by clearing away the clotted blood, and then applying a sponge to cleanse the wound, so as to seize the vessel with a pair of forceps, and if it be found to be partly cut off let it be entirely divided.

Some surgeons recommend pinching and twisting the ends of bleeding vessels with a pair of forceps or tweezers, which cause the inner coat of the artery to throw out lymph more rapidly, filling it much sooner than would have been accomplished without this measure.

When persons lose so much blood as to cause fainting, the bleeding generally ceases. Relaxing the system by giving lobelia, even though active vomiting occur, is an effectual method of checking bleeding from the uterine organs. Dr. Chapman mentions his being called in consultation with the late Dr. Physic, in a case of hemorrhage from the uterus, which having assumed an alarming character, all the means usually resorted to by the profession having failed, Dr. Chapman, from witnessing the effects of vomiting in other forms of hemorrhage, determined on trying the experiment of giving an emetic, which resulted in effectually checking the bleeding.

In another case of a lady from a distance, who was subject to uterine hemorrhage, the discharge of blood becoming so profuse as to endanger her life, consulted Dr. C., who instituted a course of emetics, with the happiest effect. On being threatened with an attack of bleeding she commenced with the emetics and took six in eight days. The hemorrhage was checked, menstruation returned, and her health was restored.

In the unimpregnated state, where hemorrhage arises from a state of extreme exhaustion, from previous loss of blood, by which the blood has become thin and watery, scarcely possessing fibrin sufficient to coagulate, then filling up the vagina with a sponge,

or cotton or soft cloths, should be resorted to in case the hemorrhage is not checked by other means.

# CANCER.

## SECTION XCII.

CANCER is a malignant disease, generally seated in the glands, though no portion or tissue of the body is altogether exempt from the liability to become diseased in this way. Thus the lips, tongue, skin, stomach, ovaries, uterus, and even the bones are subject to cancer.

Cancer, like tubercles in the lungs, is the consequence of a defect of the living principle in the part, together with a vitiated state of the constitution. A female in good health, receiving a bruise upon the breast, would soon recover from it, for if the flesh be so much injured as to destroy its vitality, the parts surrounding it will take on active inflammation, terminating in suppuration, and after the matter is discharged adhesive inflammation heals the parts. Or if the parts be merely weakened by the bruise, adhesive inflammation will produce a hardness of the part, which, however, will disappear without the formation of matter. In a certain depraved condition of the constitution, or defective organization, a bruise upon the breast, instead of being removed by one of the methods above described, namely: by means of inflammation, the part that is injured by the bruise does not take on inflammation, but gradually becomes converted into a substance which operates as a foreign body in the system, the efforts of nature being insufficient to remove it by inflammation and suppuration, it becomes converted into cancer.

Various kinds of tumors and indolent ulcers are often mistaken for cancers. Cancer doctors and doctresses are very apt to apply the name cancer to indolent sores and swellings, in order to gain a reputation for curing them; or probably from an inability to sig. xx.

distinguish between true cancer and disorders that are not of that character.

It is observed that unmarried females, and those who have never borne children, are most liable to cancer of the breast.

Cancer of the Female Breast — Symptoms. — When first discovered, a cancerous tumor is usually about the size of a marble, and is extremely hard and moveable. The disease progresses very slowly, attended now and then with a sense of uncasiness in the part, but without inflammation of the skin. "Sometimes the attention is first attracted to the bosom by a drop of bloody serum having stained the linen opposite the nipple, it having flowed from one of the lactiferous tubes. Sometimes a distinct and sharp pricking pain leads to the discovery of the swelling."

There is rarely much pain felt in the part in the early stage of cancer, but after a time the patient experiences turns of excessive darting or burning pains in the tumor, which are apt to occur at intervals of about two weeks. As the tumor becomes painful it is observed to enlarge, but true cancer rarely ever becomes larger than two or three inches in diameter, except when the disease invades the whole gland, rather than commencing in the form of a distinct tumor.

As the disease advances, the paroxysms of pain become more frequent, and are often intensely severe, as though "the parts were pierced with a knife or the nerves of the breast torn out." Prior to menstruation (about four days) the breast feels fuller, heavier, and much more painful.

After the tumor has attained a considerable size, which in some instances requires many months, or even years, the nipple is observed to become shorter, being drawn in by the milk ducts, which are pushed out of their course by the tumor; "frequently also the nipple becomes red, inflamed, excoriated, and sometimes ulcerated." A change is also produced in the appearance of the skin; it is puckered so as to resemble a cicatrix, and this arises from its adhesion to the surface of the cancer." At this stage of the disease the parts around the cancer become more firm and harder than natural, and little tumors are generally perceptible in the parts surrounding the eancer. During the progress of eaneer the

glands under the arms almost always become more or less swollen and hard.

"Exists for years without destroying life."—Months, and sometimes years, roll on, and the disease continues in its adhesive stage; and it may even destroy life without ever suppurating, but frequently it proceeds to a suppurative inflammation; then the skin appears of a living redness; the pain becomes even more severe; a slight sense of fluctuation, or rather of yielding, is perceived in the part, which gradually increates and discharges only a bloody serum, for true pus is not generated. Pus is attempted to be produced; but it is not formed on a truly malignant surface, but only upon the surrounding parts if they be ulcerated."—Cooper.

"Character of the Sore.—The surface of the sore feels hard, like the original tumor, and is remarkably insensible to pressure; and you will therefore observe the patient wipe it and handle it with a degree of roughness and want of gentleness which surprises those who are unaware of its little sensibility."—Cooper.

Cancerous ulcers are apt to bleed frequently. The bleeding may be checked by a compress of carded cotton, lint, or soft muslin cloths, applied to the part and confined by a bandage, so as to make moderately firm pressure upon the bleeding vessels. As the ulceration proceeds a deep cavity is formed, sometimes extending to the breast bone.

Patients affected with cancer are apt to complain of rheumatic pains in various parts of the body, more particularly in the loins and thighs.

As the disease extends, the arm upon the diseased side becomes swollen; there is frequently much difficulty in breathing, the patient being unable to lie down; a sense of stricture and spasms at the pit of the stomach is often experienced, and sometimes attended by vomiting. Finally the constitutional energies become exhausted, and the patient sinks under the disease.

It should be recollected, however, that it is not every case of cancer that destroys life, even when the tumor is not removed. Sometimes the disease remains stationary for many years.

The female breast is very liable to tumors that do not partake of the cancerous nature. A cancerous tumor in the

breast is rarely ever observed in females under thirty years of age.

TREATMENT.—The chief indication in the treatment of cancer is the employment of such means as are best adapted to improve the condition of the general health. An occasional course of medicine, together with the daily use of stimulants, cayenne, composition or spice bitters, and broken doses of lobelia in pill or tincture, given every two or three hours, constitute the remedies principally to be employed in the way of constitutional treatment.

If there be acidity of the stomach, and the bowels costive, purified charcoal will be beneficial. It may be taken prepared in composition or spice bitters tea. The dose of the charcoal is a large teaspoonful, to be repeated two or three times a day before meals.

When a violent paroxysm of pain comes on, it may be mitigated by the use of the warm foot bath, or of the vapor bath, and the use of enemas composed of some mild stimulant, such as weak composition or pennyroyal tea, with the addition of a teaspoonful of lobelia, either the powder, tineture or third preparation.

Whatever tends to equalize the eireulation of the blood, and of the nervous power, will relieve pain, no matter where it be situated. The free use of pure stimulants, cayenne and composition, containing small portions of lobelia, will also be useful in relieving paroxysms of pain.

Difficulty of breathing will be relieved by the treatment above mentioned. The same remedies are also indicated for the relief of the dry and harrassing eough which often attends cancer, more especially in its more advanced stages.

Toxics will be proper, with a view to strengthen digestion—such as spice bitters, balmony, &c.

Diet.—"It is supposed that a vegetable diet, and food affording little nourishment is conducive to recovery. There is no greater mistake. Whatever weakens leads to an increase of the disease, and to a more rapid termination of the existence. Low living renders the person irritable, quickens the pulse, and makes the constitution feel the disease more strongly. Vegetable diet has not the least beneficial influence over this complaint."—Cooper's Lectures.

Applications to the Tumor.—During the earlier periods of cancerous tumors they should be kept warm, and the skin in a perspiration, by the application of some simple kind of salve, spread on silk oil cloth, or by wearing a piece of rabbit skin with the fur side to the breast.

Poultices are to be applied when the tumor softens and the skin becomes inflamed. The poultice may be made of elm, ginger and cracker, or any soft emollient substance, adding a portion of ginger, to render it moderately stimulating.

Local Treatment for Open Cancer—Cancer.—Many reputed cures for cancer have been introduced into use in the form of salves, plasters, and balsams, but which upon the whole have doubtless been of far more injury than benefit. Powerful caustic and corroding poisons, as preparations of arsenic, are applied by some cancer doctors, to almost every kind of indolent ulcer they meet with, and if it should heal, it is announced as a case of cancer cured; whereas in true cancer such applications would probably have little effect other than to irritate the parts and aggravate the sufferings of the patient, without accomplishing a cure.

EXTRACT OF SHEEP SORREL.—The use of this article appears to have operated very favorably in some cases of cancer. The extract is obtained by evaporating the juice of the sorrel, in tin or pewter plates set in the sun, until it acquires the consistency of tar. This is spread on thin leather or silk oil cloth and applied to the cancer, renewing it daily.

EXTRACT OF RED CLOVER BLOSSOMS.—This preparation is recommended by Dr. Thomson as a valuable application in cases of open cancer. I cannot speak from personal knowledge of the efficacy of this remedy.

CAUSTICS.—Small cancers situated in the skin, as in cancer of the lip, the frequent application of the caustic potash, or lunar caustic, may succeed in removing them. After each application of the caustic, an emollient poultice or mild salve may be applied.

LOUNSBERRY'S PLASTER.—A Baptist minister, by the name of Lounsberry, residing in Connecticut, prepares a plaster which appears to be gaining considerable reputation as a cure for cancer.

I have witnessed the effects of this plaster in but one case of cancer, and I must say that I was much surprised and gratified at the effects produced.

The Case.—Mrs. Harding, residing in Second street, had a true cancer in her right breast, for which she had consulted the principal surgeons in the city, one of which advised its removal by an operation, whilst every other one that she applied to told her it was too late to operate. I had examined this tumor every week or two, during a period of two years after it had become an open cancer. Various kinds of plaster were employed, without effecting any change for the better. On the application of the plaster above mentioned, the cancer began to assume a different aspect, and in the course of a few weeks a distinct division took place between the cancer and the living flesh, and finally the whole of the cancer came away, leaving a cavity, the surface of which had a healthy appearance.

Several months have elapsed since this cancer was removed, and although the parts are not entirely healed, yet there is no appearance of a return of cancer in the part. In this case, however, as it often happens in cancer, the constitution is contaminated with the disease, there having been for two years past symptoms indicating the existence of cancerous tubercles in other parts of the body, and which must eventually terminate fatally to the patient.

I do not know the composition of Lounsberry's plaster, yet I have observed that when it is applied to a raw surface, it does not corrode or even occasion inflammation. This plaster is much less painful to the parts than cancer plasters are in general.

I should not recommend a secret medicine designed to be taken inwardly, but as this plaster does not appear to possess any deleterious quality, I should not hesitate to employ it. If there be a cure for cancer it ought to become universally known.

With regard to the removal of cancer by the knife, it is certainly less objectionable than to have it destroyed by the application of caustic, unless the cancer be very superficial, and even then the knife would be less painful than caustic.

Cancer depending in the great majority of instances upon con-

stitutional disorder, is seldom effectually cured by an operation. In four cases out of five the disease breaks out in another part of the body, in the course of a year after a cancer has been thus removed. Cancers situated in the skin may be effectually removed, either by the knife, by the application of plasters, or by caustic, and sometimes the disease does not return even where the seat has been in a gland, for instance in the breast.

# INFLAMMATION.

## SECTION XCIII.

Inflammation is a restorative action instituted by the constitution to heal wounds, repair injuries, and to remove extraneous bodies lodged in the flesh. Thus if a bruise be inflicted upon a part, an inflammatory action is established to restore the part to a healty condition; wounds are healed by the same means; if a splinter be lodged in the flesh inflammation is established, by which matter is formed around the splinter, separating it from the living parts.

A wound cannot heal without inflammation, except in case of a smooth cut by a sharp instrument, and the wound be immediately closed so as to exclude the admission of air into it. In order to repair an injury, the part must receive a greater supply of blood than is natural to it when in a healthy condition. The blood furnishes the substance that unites wounds.

"Inflammation may be considered as a genus, of which there are many species. It may be divided into healthy and unhealthy. The healthy is that which will always take place in a healthy constitution or part, and is rather to be considered as a restorative process than a disease. Unhealthy inflammation is that which takes place in an unhealthy constitution or part, and will vary according to the kind of unhealthiness of that constitution or part."—Hunter.

A wound that heals readily in a healthy constitution may in a vitiated or disordered condition of the health become a very troublesome and protracted sore. If a person in good health receive a bruise, so severe as to destroy the vitality of a portion of flesh, the first step which nature takes for repairing the injury is to direct an increased supply of blood to the part, and set up an inflammation in the injured parts, occasioning increased heat, with redness and swelling. The inflammation causes the cells of the cellular tissue to become blocked up, which prevents the disease from spreading to the surrounding parts. The flesh feels firm, and the swelling is circumscribed, as is observed in the case of a common bile. The next point is to remove the portion of flesh which was killed by the bruise. This is accomplished by means of an inflammatory action, converting the parts immediately surrounding the dead flesh into pus or matter, which separates the dead from the living flesh; the pus finds its way to the surface and is discharged. The parts having become freed from the dead flesh, the next step is to heal the cavity. This is also accomplished by an inflammatory action; granulations are formed on the sides of the cavity, by which the parts are united. In case of a bruise that does not kill any portion of the flesh, an inflammatory action is established, and the coagulable lymph supplied by the blood is diffused through the cellular tissue, rendering the parts more or less swollen, and firmer than natural, but no pus will be formed; the swelling and hardness gradually subsiding until the parts are restored to a healthy condition. When a person is string by a bee, nature quickly brings on inflammation, in order to block up the cellular tissue around the poisoned part, and thus prevent the poison from being absorbed, or extending further. A broken bone cannot unite without inflammation. Cases have occurred where broken bones have not united by bony union, in consequence of the broken part being frequently subjected to motion, breaking up the knitting of the bone, until finally the inflammation has subsided, and the parts not being supplied with sufficient blood to furnish material, and sustain the action necessary to unite the broken bone, a false joint is formed.

Dr. Physic devised a plan for effecting a reunion of the bone in

such cases, by forcing a threaded needle through the limb, between the surfaces of broken bones, and leaving the thread in the part for the purpose of exciting inflammation, and thus furnishing the means necessary for a reunion of the bone.

Although inflammation be a restorative of healthy action, it is liable to become perverted into an unhealthy one, or at least the constitution may fail of accomplishing the design of inflammation. Thus if a person of scrofulous constitution, or whose system is in an otherwise unhealthy condition, should receive a bruise which destroys the vitality of a portion of flesh, the inflammation that ensues will be extremely liable to assume an unhealthy character, the efforts of nature being too feeble to establish healthy inflammation, and instead of being circumscribed as in case of a bile, it may spread over a considerable extent of surface, forming what is called erysipelas; and when matter is formed in the injured part, instead of being confined to the spot where it is secreted, as it is when the inflammation is of a healthy character, it spreads to a greater or less extent through the surrounding parts, which become swollen, doughey, and without extra heat attending, and may require a long time for the parts to become restored to a healthy condition in consequence of the want of power in the system to establish an efficient inflammatory action. A simple incision in the flesh from a sharp instrument, that heals rapidly in a healthy constitution, may become converted into an indolent ulcer, in one o an unhealthy constitution. An injury upon the skin, that would be followed by healthy inflammation, and the part restored to a healthy condition in a short time, in a young man, would be apt to be converted into an indolent ulcer, and probably continue for years in an old man in feeble health. The healing power is sometimes almost destroyed in constitutions poisoned by the use of mercury: the simple scratch from a pin, causing a long continued running sore. Blisters have occasionally been observed to become gangrenous, in consequence of extreme prostration of the healing powers of the system; the constitutional energies becoming too far exhausted to establish healthy inflammation, and to sustain the action necessary to heal the parts. Inflammation may assume an unhealthy character in consequence

of the severity of an injury—destroying, almost, the vitality of the surrounding parts. This fact is frequently noticed in gunshot wounds, the parts surrounding the wound being deadened, the vessels of the parts have not sufficient power to carry on a healthy inflammatory or restorative action.

Inflammation in internal organs is no less curative in design, than when it is confined to external parts of the body. taken into the stomach is followed by imflammation of its mucous membrane, unless the dose be so large as to destroy the vitality of this organ. The direct tendency of poison is to destroy the principle of life, and inflammation is the means which nature employs to counteract the effects of the poison and preserve the life of the parts. The inflammatory action existing in the mucous membrane of the stomach in those forms of disease called fevers, is the restorative power of nature in action. No person ever recovered from a low form of fever without some degree of inflammation having existed in the stomach. In inflammation of the stomach medicine should be given that will excite the secretions, for which there is no article superior to cayenne pepper. Inflammation of the throat is relieved and its efforts aided by gargling with pepper tea, which excites the secretions and relieves the congested vessels. It is ascertained that the mucous membrane of the stomach seldom exhibits marks of inflammation when patients die soon after an attack of some highly malignant form of disease, for instance, yellow fever: the force of the cause of disease having suddenly prostrated the living principle so low that the constitution is unable to establish an inflammatory action. I have invariably employed cayenne pepper tea in every variety of fever, attended with symptoms of inflammation of the stomach, and have never observed the inflammation to be aggravated by it. Inflammation on the surface of the body may require cooling applications, to lessen the determination of blood to the parts; whereas inflammation in a secreting surface, like that of the mucous membrane of the stomach, require stimulants such as are used by Thomsonians, which restore the secretions.

Spontaneous Inflammation.—In the common form of bile, we observe an instance of spontaneous inflammation. The inflam-

mation is not less a curative action when it occurs spontaneously from constitutional causes, than when it occurs after local injuries. In small-pox, the inflammation attending the eruption is the curative action of the system. It has been observed universally, that where small-pox pustules are distinct and surrounded by a well developed inflammation, that there is but little ground for apprehension of danger; but when the eruptions are surrounded by an imperfectly developed inflammation, or the inflammation assumes an unhealthy character—being converted into erysipelas, there is great danger of an unfavorable termination of the disease, or at least that the efforts of nature will prove insufficient to eradicate the disease effectually from the system, thus leaving the patient affected with chronic symptoms.

When a dentist applies arsenic to the nerve of a decayed tooth, at first there will be a sensation of coldness in the part, which will soon be followed by pain and inflammation; the inflammation is necessary to prevent the deadening effects of the arsenic from extending further along the nerve, by establishing a division line between the live and dead portions of the nerve.

If a person have his foot pierced by a nail, followed by inflammation in the part and some discharge of matter, there is seldom any danger to be apprehended; but if the wound be deep, and closes without there having been inflammation in the part, means should be taken to excite inflammation in the wound, otherwise the patient will be more or less liable to lock-jaw.

Case.—A young man residing in Trenton, N. J., received a severe injury in the hand by the discharge of a gun. The wound was dressed with emollient applications, and it exhibited no marks of inflammation even after the lapse of several days from the time the injury was inflicted. At length the patient was seized with lock-jaw, and died in the course of two or three days after; the injured part not having been at any time sore or inflamed.

"Let us suppose that two women receive each a blow upon the breast, one with a healthy and vigorous constitution, and the other with a system worn down with care, anxiety and disappointment, and in a constant state of chronic feverish excitement in which the secretions are imperfectly performed, and is thus predisposed

to the formation of cancer: in the first individual, the inflammation produced will be strictly healthy, going through its different stages until the cure is accomplished; but in the other, owing to constitutional peculiarity, the same extent of injury will produce cancerous disease; an affection over which all remedies hitherto tried have little control, and extirpation is but an uncertain mode of relief."—Cooper's Lectures.

Inflammation sometimes occurs on the extremities of aged persons, in consequence of debility. There being a tendency to stagnation of the blood in the parts, in consequence of a want of power in the vessels, the constitution directs an unusual supply of blood there in order to give increased power to the vessels, and this effort is frequently attended by inflammation of the skin.

Finally, whenever nature is called upon to repair an injury, such as a bruise, cut, or wound of any description, or to overcome debility in a part, however produced, she performs the cure by means of inflammation. It must be borne in mind, however, that the efforts of nature often require the aid of medicine and other means for the regulation and sustaining of her restorative actions. Thus in a common bile there may be an undue accumulation of blood in the parts, causing so much swelling and pain as to prove detrimental to the sanative inflammatory efforts. Here means should be employed for lessening the determination of blood to the part, facilitate its return to the heart, and to reduce the external heat of the inflamed part when it is too high.

Chronic Inflammation.—When inflammation fails of accomplishing its object, and, instead of coming to a crisis, becomes seated, it is termed chronic inflammation. Suppose that an individual is attacked with erysipelas, and the inflammation, instead of forming a crisis and disappearing in the course of a few days, as it usually does, should become seated in the part, the efforts of nature being too feeble to restore the parts to a healthy condition; such would be termed chronic inflammation. Acute inflammation is often converted into chronic inflammation by improper treatment, weakening the power of action and thus frustrating the designs of nature. I once saw a laboring man who lost the use

of one of his hands, in consequence, I believe, of the continued application of cold lead water to erysipelas. The inflammation covered the back of the hand and extended up nearly to the elbow. Lead water was applied by the direction of a physician, and the application of it continued three weeks. The parts became so much weakened that the vessels apparently lost the power of action, the muscles became stiff and rigid so that the hand became useless. It is not unlikely that this patient under a different course of treatment would have retained the use of his hand.

Treatment of Inflammation in general — Constitutional Treatment.—When the general health is disordered inflammation is liable to assume an unhealthy character. Hence constitutional treatment is in many cases of the greatest importance as a means of curing inflammation, by aiding the efforts of nature. Thus if a patient in bad health receive a severe injury he should be carried through a course of medicine, repeating it if necessary, together with the continued use of pure stimulants to sustain the secretions, and aid in equalizing the circulation and promoting perspiration. Severe injuries always occasion more or less derangement in the system, weakening the restorative power of the constitution, and increasing the liability to the occurrence of unhealthy inflammation, erysipelas for instance.

If an individual receive a severe injury, as a blow upon the head or fall from a height, soon after eating a full meal, his digestion will be suspended, and the imperfectly digested food will still further oppress the functions of the stomach and aggravate the symptoms. Under such circumstances an emetic should always be given, no matter in what part the injury may be situated. There is no better form of emetic than the following:

A teaspoonful of the third preparation of lobelia, and one of green lobelia powdered, adding a teacup two-thirds full of strong bayberry tea, sweeten and give at once, repeating the dose as often as necessary; if the injury be on the head, the emetic may be preceded by the warm foot bath or vapor bath, and an enema administered, with the view to determine the circulation to the bowels, and thus lessen the tendency to a great determination of blood to the head. Although an injured part requires a supply

of blood greater than is necessary when that part is in a healthy condition, still there may be too great a determination of blood to the injury, or there may be too great a collection of blood in the part in consequence of the weakened state of the vessels, they being unable to return the blood by the veins into the general circulation. I doubt whether any intelligent physician, whose mind was not influenced by prejudice or warped by preconceived opinions, could witness the effects of a thorough Thomsonian course of medicine, without perceiving the philosophy of its application, in all cases of inflammation, wherever seated.

The constitutional disturbance after severe injuries is sometimes very great, requiring strict attention. The treatment for constitutional shocks or disturbances will be pointed out hereafter.

DURING THE FIRST STAGES OF INFLAMMATION, if there be general fever, or a dry and hot skin and foul tongue, or if the inflamed parts are very painful, or the patient restless and distressed, then, besides a course of medicine, the system should be relaxed by giving broken doses of lobelia, and occasionally a dose of composition or pepper tea, or of simple herb teas, pennyroyal or ditany.

The physician who asserts that such a course of treatment as I have just described, will aggravate inflammation, or have any other tendency than that of hastening its progress to a favorable termination, has imbibed fals; principles in medicine, instead of the truths of the science.

The above course of treatment is not to be restricted to the first stages of inflammation; it is during this period that it is in general most required. It will be proper, however, during any stage of inflammation when the symptoms appear to demand it.

"When you are required to take charge of patients suffering from an injury, which demands a length of time for its restoration, you must be exceedingly careful how you take away blood from the system generally, but must in preference adopt local bleeding; for if, as I have observed, you adopt a system of free depletion, nature will not be equal to the restoration of the injured parts, and the most disastrous consequences will follow the indiscriminate employment of blood-letting. There is not a greater error than this in the practice of surgery."—Cooper's Lectures.

The following case is related by Sir Astly Cooper, as an instance of the fatal consequence of over-bleeding. "A stout man was admitted into Guy's hospital, having a simple fracture of the tibia, with considerable contusion of the surrounding pars; a day or two after his admission, he had severe constitutional irritation and acute pain, with spasmodic action of the muscles near the seat of injury. To relieve these symptoms, the dresser was directed to take some blood from the arm of the patient, which he did; but thinking it pro e that faintness should be produced, as a proof of its effects upon the constitution, and forgetting that the patient was in a recumbent position, he abstracted so large a quantity of blood, that all power of restoration was completely annihilated and the man died."

The above case is but one of thousands, and probably tens of thousands, where life has been cut short in this way.

When an individual is badly hurt, it is the almost universal practice among physicians to bleed, under the impression that it will lessen the tendency to inflammation. So far as it relaxes the system and occasions perspiration, it may lessen the pain, and for the time present over excitement of the part, but there is as much probability of such a course of practice perverting the salutary efforts of nature, the inflammation consequently assuming an unhealthy character, as that it will lessen the tendency to violent inflammation. The administration of a vapor bath will be attended with all the good effects that can result from bleeding, and without the liability to any of the danger consequent upon the loss of blood.

Vapor Bath.—To restore the secretions of the skin is an important indication in the treatment of inflammation, whether it be seated in external or in internal parts. The administration of the vapor bath, together with the use of pure stimulants, as capsicum or composition tea, and broken doses of lobelia, will restore perspiration and likewise excite the secretions of the mucous membrane of the stomach, which is equally important in the treatment of inflammation. These are remedies which harmonize with the living principle, and at the same time that they relieve the suffering of the patient, they aid the efforts of the constitution in repairing injuries.

In the latter stages of inflammation for instance, where there is a free discharge of pus from a part, and the patient is clear of fever, bitter tonics may be given.

When the tongue is furred and manifests a tendency to clean around the edges, or the coating on the tongue softens, then the astringent or anti canker medicine should be employed occasionally, with the view of clearing the mucous surface of these morbid secretions, or canker.

DIET.—In the early stages of inflammation, and more especially if the tongue be coated, or the general health deranged, the diet must be confined to such articles as require but little effort to digest them, such as light gruels, toast and tea, barley water, rice, milk porridge, &c. It is better that the patient have a scanty supply of food than to take such as the stomach cannot digest, for this will always operate against nature. It is not so much low living that is demanded, but it is the want of power to digest strong food that must be regarded.

When the patient is in a relaxed condition with absence of fever, cleaning of the tongue, and a tendency to warm perspiration, the diet should be nourishing—eggs, custards, oysters, beef steak, mutton, wild game, bread and butter, and whatever the patient may fancy that does not disagree with the stomach, avoiding, of course, articles that are known to be hard of digestion, such as hot cakes buttered, sausages, sweet cakes, fresh pork, and corned beef.

OF EXTERNAL APPLICATIONS IN INFLAMMATION. — In acute inflammation, attended with great heat and swelling in the parts, the application of cotton or soft cloths kept constantly damp with whiskey and water, or vinegar and water will afford relief. Although inflammation be a restorative action, still it often needs the aid both of internal and external remedies, to assist the constitution and the vessels of injured parts in regulating the inflammatory action. A wounded part requires a greater supply of blood to repair the injury, than is sent to this part when in a healthy condition; yet without proper treatment there may be an undue accumulation of blood in the part, occasioning unnecessary pain and acting injuriously both upon the injured part and upon the general health.

Poultices are useful in recent cases of inflammation, as in biles, felons, severe bruises, and also in injuries where the flesh is much torn or lacerated. In pleurisy though the inflammation is seated in inward parts, still experience proves the utility of poulticing the affected side provided the poultice be kept warm. Slippery elm, white pond lilly, powdered cracker and ginger form a poultice adapted to all cases where there is inflammation.

In erysipelas, and in all cases where an inflammation has been long continued, cold applications and emollient poultices are improper. Local steaming and stimulating applications are here required, to increase the power of the enfeebled vessels. It is in active inflammation, such as attends common biles and wounds in healthy constitutions, that the use of external cooling remedies is indicated.

Warmth and Moisture.—Warm fomentations, and the application of steam or warm vapor, may be employed with safety in all cases of inflammation; and generally these applications afford relief even in acute inflammation, by exciting perspiration. In chronic inflammation, for instance, as it occurs on the legs of aged persons, stimulating applications should be applied either in the form of liniment or poultice.

Case.—During the summer of '39, I was called to visit an old lady residing in Water street, who had chronic inflammation on both limbs, extending from the ankle joint to the knee, the parts being much swollen. The case was one of long standing, but was cured by steaming the limbs every two or three days, and covering the diseased parts with a poultice composed of the dregs of No. 6, slippery elm bark and white pound lilly. The poultice was spread on silk oil cloth, in order to prevent evaporation, and to retain the heat. The patient also took composition powder in luke-warm water, three or four times a day; and the feet were elevated upon a chair when the patient was out of bed.

Position.—When inflammation is seated about the head, it should be elevated above the level of the body; or if it be seated on a limb, it also should be raised higher than the body. This lessens the determination of blood to the inflamed part, and by the aid of gravity favors the return of the blood from the parts inflamed.

Case.—"I was sent for" observes Astley Cooper, "to see a gentleman farmer, in the neighborhood of Rayleigh, in Essex, who for a long time had been subject to a very severe inflammation in both his legs; they were of a very dark red color, much swollen, and gangrene was threatened in them; the constitutional irritation was great, and his tongue covered with a brown fur. When I saw him, his legs were resting in a tub of cold water, and on his taking them out they smoked. I had him immediately placed on a sofa, and contrived to rest his legs upon one of its ends, so as to raise them much higher than the body; the vessels soon began to unload themselves, and in a short time the redness of the skin was much lessened; I then applied flaunels, which had been dipped in tepid water, and afterwards in warm water; this produced a free perspiration, by which the skin became unloaded; the swelling and pain consequently diminshed. He gradually recovered, and in six weeks was able to ride a considerable distance. It would be absurd to attempt to cure extensive inflammation in a limb, if it were allowed to remain in a depending posture."

In inflammation about the hand, for instance a felon or bile, is rendered extensively painful by the hand being allowed to hang

down.

Rest. — During the active stage of inflammation, the parts should be kept at rest. This is more particularly necessary in inflammation of the joints.

Pressure.—In chronic inflammation of an indolent character, more especially when accompanying abscesses—carbuncle, for instance—benefit will be derived from pressure; by bandaging the parts or applying strips of adhesive plaster. Erysipelas sometimes leaves the parts thickened and hard, after the inflammation has subsided; here pressure will be required, to excite action in the absorbent vessels, for the purpose of removing the swelling.

FRICTION.—In chronic inflammation of the joints, rubbing the parts briskly, excites the circulation, and is frequently followed by very marked benefit.

In disease of the general system, fever is nature's hand-maid; in local diseases her chief dependence is upon inflammation.—
Hence in no case of fever or inflammation should we aim to sub-

due or break down fever or inflammation, but to assist the efforts of nature, by means which harmonize with her established laws.

# SPRAINS.

### SECTION XCIV.

Sprains are caused by a sudden wrench or twisting of a joint by which the ligaments or tendons are either torn or violently stretched.

The wrist and ankle joint are those most liable to sprains.

Sprains are attended with severe pain at the time of the injury, which sometimes continues for hours. Soon after the accident the parts begin to swell in consequence of blood escaping from the vessels that are ruptured.

Immediately after a sprain the joint can be readily moved; whereas in a dislocation, the joint is stiff and rigid in consequence of the contraction of the muscles.

When inflammation comes on to repair the injury from the sprain, the parts become more swollen and extremely tender, so that the slightest motion in the joint will cause pain.

TREATMENT.—In sprains the first thing to be attended to, is to prevent blood from being effused into the parts from the ruptured vessels. This may in a great measure be prevented by pouring a stream of cold water upon the part soon after the accident, and keeping the part in an elevated position. The stream of cold water drives the blood from the parts and contracts the vessels. It may be continued fifteen or twenty minutes at a time and repeated two or three times in the course of the first three or four hours after the injury. By this time the torn vessels will have become closed and the parts then require to be kept warm and bathed frequently with salt and vinegar, No. 6, or stimulating liniment.

When inflammation occurs, evaporating lotions, as alcohol, or whiskey, diluted with water, and warm fomentations as wormwood stewed in vinegar must be used. Steaming the part occasionally will prove especially beneficial. If it be the wrist joint that is sprained, the arm must be carried in a sling; or if it be the ankle joint it should be placed on a chair whilst the patient is sitting up, and avoid producing motion in the injured joint.

Application of Splints.—To secure the joint from motion, splints should be applied. This is more particularly necessary in injuries of the wrist joint. If motion in the joint be not prevented whilst the broken tendons, or ligaments are uniting, by means of inflammation, it may break up the new adhesions, and thus greatly retard the case. It is not until after the inflammation has entirely disappeared that motion in the parts should be allowed.

After the inflammation and extreme soreness has subsided, the part remaining swollen, the action of the absorbent vessels must be promoted by rubbing the parts occasionally with the warm hand, or dry flannel, and then applying stimulating liniments or embrocations, and bandage the joint as tightly as can be borne comfortably, always commencing the bandage at the end of the limb. Steaming will also promote the action of the absorbents.

A joint that has been once badly sprained, will in general remain weak a considerable length of time, and be more easily sprained than before. When there is violent pain in the parts, as generally happens immediately after the injury, the patient will experience relief by taking a dose of the third preparation of lobelia, or a dose of lobelia powder, in composition or pepper tea.

# BRUISES.

## SECTION XCV.

A slight bruise requires in general but little attention, the injury being soon repaired.

A very painful abscess sometimes forms in the heel, in consequence of a bruise. This kind of abscess is commonly called a stone bruise. The proper treatment for a stone bruise when first felt is the application of steam to the part to promote perspiration, and keeping the foot on a chair when sitting up. If these do not restore the circulation of the part and remove the soreness, after being repeated two or three times, a warm poultice must be applied to keep the parts relaxed and in a perspiration, until the abscess points, or there be other evidence of the existence of matter in it; the part may be opened, and the poultices continued until the abscess ceases to discharge pus freely; after which some kind of salve or plaster must be applied to exclude the air from the cavity.

# SEVERE BRUISES, BY WHICH THE SYSTEM RECEIVES A SEVERE SHOCK.

## SECTION XCVI.

In all cases of severe bruises the vital powers of the system will be more or less prostrated by the fall or blow which occasions the bruise. A man receives an injury, for instance, a severe blow upon the head, falls from a height, or is thrown from a horse with such violence as to cause concussion of the brain—he will lay senseless and pale; the pulse weak; the breathing feeble, and in some instances scarcely perceptible. The patient may recover his sensibility in the course of a few minutes. If, however, reaction should not take place, and consciousness in a measure be not restored, in a few minutes after a severe injury, means should be taken to bring on reaction. These are, rubbing the surface with the warm hand or warm flannel, keeping the head on a level with the body, administering stimulants by the mouth and also by injection, and the application of external warmth, either in the

form of steam or by the application of warm bricks; and bathing the surface and extremities with stimulants.

INJECTIONS.—Stimulating injections constitute the most efficient means of restoring animation in persons that are seriously stunned by an injury. Two or three teaspoonfuls of the third preparation of lobelia should be administered in half a pint of luke-warm water; if this medicine be not at hand, almost any stimulant may be employed, such as capsicum or composition tea, No. 6. or even vinegar and water or brandy and water.

EMETICS.—The operation of emetics is decidedly beneficial in cases of great prostration after severe injuries. If the system sustain a severe shock, within an hour or two after the individual has taken a hearty meal, free vomiting will be highly necessary. A severe shock to the system, suspends at once the power of digestion, and if there be undigested food in the stomach, it will oppress the powers of life, and may prevent or greatly retard the occurrence of reaction. No danger is to be apprehended from exciting vomiting under such circumstances, namely: where a person is severely injured within an hour or two after taking a meal. The best form of an emetic is the third preparation of lobelia, given in bayberry tea; or the lobelia powder may be given, adding a portion of No. 6, or capsicum. When a person is severely stunned soon after a full meal, rendering it necessary to produce free vomiting, the usual emetic, (lobelia) not being at hand, a table spoonful of ground mustard given in warm water, or the patient made to swallow warm salt water freely, may answer as an emetic. Forcing the feathered end of a quill, far down the throat, is sometimes resorted to, in order to produce vomiting.

Animation being restored, the use of pure stimulants must be continued, in small doses, aided by the application of external warmth, with a view to sustain the system, and excite moderate perspiration.

Steaming is of great service to patients who have been badly bruised. It is always safe to apply the vapor bath, the patient being placed on a couch or mattrass, when he is too feeble to sit up. When there is fever, and the patient restless it will not do to apply dry heat externally, and even when a moist heat is applied

during fever it may be necessary to bathe the face and surface of the body with cold whiskey and water or vinegar and water.

EXTERNAL APPLICATIONS TO INJURIES.—In the case of a bruise the flesh not being torn or cut, warm fomentations are to be applied—a poultice of wormwood stewed in vinegar and thickened with rye meal, flannel wet with No. 6, or with salt and vinegar, or bathing with stimulants and applying silk oil cloth over the parts to favor perspiration.

When the flesh is both torn and bruised, a poultice must be applied, and renewed daily until the parts suppurate and cease to discharge matter freely, when a simple dressing of salve will answer a better purpose than a poultice. Whatever emollient substance the poultice be made of, a portion of ginger must be added to render it moderately stimulating.

Bruises on the head, may be treated by the application of No. 6, or salt and vinegar. If the scalp should be cut, the edges of the wound must be properly adjusted, the hair cut away, and strips of adhesive plaster applied across the wound leaving space for the escape of the blood and serum that oozes from wounds in general; soft lint must be laid over the wound, and a bandage or cap applied. If the patient complain of great heat in the part, the head may be wet occasionally with whiskey, vinegar, or with No. 6. The application of No. 6 to a wound, is useful, as it stimulates the vessels and aids them to carry on healthy inflammation, by which the wound is healed, or the injury repaired. A severe injury never was healed nor injured parts restored to a healthy condition without the aid of inflammation. Therefore in severe injuries the indications are not to subdue inflammation, but to aid and regulate the healing efforts of nature, by sustaining an equilibrium in the circulation, promoting the secretions both of the skin and internal organs, regulating the temperature of the inflamed part, and supplying the stomach with food suited to its condition. If two individuals, one in vigorous health, and the other feeble and with but little constitutional vigor, should both receive a severe wound of equal extent; in the healthy person the inflammation in that part will be of a healthy character and run

its course quickly; whereas in the other the efforts of nature being feeble and the blood not so richly supplied with nourishment, the inflammation will be more liable to assume an unhealthy character or the wound be tedious in healing. And again when a patient is in bath health, the system does not possess the same power to maintain an equal circulation of blood throughout the system as when in health, and therefore congestion or an undue accumulation of blood in the injured parts will be more likely to occur.

When there is an undue determiation of blood to an injured part; occasioning much swelling and hardness, attended with a sense of great heat and pain, the parts should be kept wet with evaporating lotions, as camphor and water, alcohol and water, or vinegar and water; the patient should be taken through a course of medicine, if the severity of the symptoms demand it, together with the continued use of stimulants and broken doses of lobelia, with a view to promote perspiration, and excite the secretions of the stomach and bowels aided by the application of external warmth.

Severe injuries are in general followed by more or less fever, in the course of a few days after the injury; the tongue will become dry and furred, the skin hot and dry, and the pulse increase in hardness and quickness. In this condition of the system stimulants—capsicum, ginger, composition or simple herb teas must be given, together with small doses of lobelia, bathing the surface when needed, with alcohol and water, or vinegar and water, and occasionally the administration of a vapor bath, followed by an emetic, if the system be much disordered, or the injury assume an inflammable appearance.

Case.—A young man engaged in a manufactory, had his arm caught between two large cog-wheels, which tore the flesh from one-half of the arm from a few inches above the elbow up to the shoulder, and split off a portion of the arm bone which caught in between the cogs, and stopped the machinery. The shoulder and part of the back were bruised into a jelly. The physicians of the village were called, who decided that the arm must be taken off at the shoulder, and appointed the hour for performing the opera-

tion. The patient, however, requested that his step-father, a Thomsonian physician who resided some miles distant, should be sent for. On his arrival he applied a poultice over the whole of the injured parts, carried him through a course of medicine; occasionally repeated it, and gave freely of stimulants, to promote the curative action of the system, and in six weeks the wounds were perfectly healed. If the great vessels and veins of the arm had been broken off, no treatment could have saved the patient's arm; but when these are not destroyed, however severe the injury may be, there is a probability of saving the limb.

# BRUISED WOUNDS.

#### SECTION XCVII.

These are wounds in which portions of flesh are torn, mashed, or bruised, so as to destroy the vitality of the injured parts.

TREATMENT.—Warm fomentations and moderately stimulating poultices are required, in order to favor suppuration—the method employed by nature to remove the disorganized flesh. When the dead parts have sloughed away, the poulticing is to be abandoned, the sides of the wound drawn together, by strips of adhesive plaster, and the air excluded from the wound by salve spread upon soft linen or muslin and applied over the parts, and then properly bandaged. If the parts continue to form matter freely, lint should be applied to absorb the pus. The dregs of No. 6, mixed with about an equal quantity of elm, form a good poultice.

THE CONSTITUTIONAL TREATMENT should be regulated to suit the exigencies of the case. Promote the secretions by the use of pure stimulants; if the system be much disordered, administer a course of medicine, and during the process of suppuration, give tonics.

THE DIET should be nourishing, provided the patient be clear of fever, and the tongue clean or cleaning.

# BURNS AND SCALDS.

## SECTION XCVIII.

For slight burns or scalds, in which the skin is not destroyed, the best application is cold water, either holding the part in a basin of cold water, or apply cloths on the parts, kept wet with cold water or whiskey and water. This is to be continued until the smarting ceases; then cover the parts with an ointment prepared of sweet oil and lime water, or bind dry cotton on, or cover the parts with oiled silk. When blisters are formed, avoid breaking the skin until the parts have had time to secrete a layer of lymph on the surface of the burn, which will protect the parts from the action of the air. The best way to open a blister is to pierce it in several places with a needle, and then cover the parts with a thick layer of carded cotton or soft muslin cloths kept damp with alcohol and water, or whiskey and water, and this continued until the parts cease to be painful; or apply some simple ointment; the one above mentioned is to be preferred.

Avoid removing the Dressing until several hours, or even a day or more, has elapsed. Removing the dressing too soon breaks up the tender skin that nature forms, aggravates the burn, and greatly retards the cure. Whatever dressing be applied to a burn, which is found to relieve the pain, whether it be dry cotton, cloths wet with evaporating lotions, sweet oil and lime water, or a poultice of scraped potato or carrots, it should be allowed to remain on, at least for several hours, or even much longer, unless there be a necessity for its being removed.

When the outer skin is removed at the time of a burn or scald, I mean the skin that raises up where a blister is formed, the parts should be covered as speedily as possible, with an ointment of lime water and oil, lime water and milk, or of lard and common soot from the chimney well rubbed together. Whilst the ointment is preparing, the part may be held in cold water, or wet cloths laid on, to relieve the pain. The ointment must be spread on linen or muslin, and when applied, cloths or cotton may be laid on this

dressing, kept damp or wet with cold water, to relieve the pain. The under dressing must not be removed for two or three days; indeed it is better to let the first dressing remain on until a new skin be formed on the burned parts.

WHEN A PART IS SEARED SO as to destroy the skin, from live coal or a red hot iron, a poultice must be applied; for when the under layer or true skin is disorganized, suppuration will take place, and instead of a new skin being formed, as there will be when only the outer layer of the skin is removed, the parts will heal by drawing together, and thus form a scar or seam in the skin. The poultice recommended by Dr. Thomson, which consists of a compound of slippery elm, white pond lilly root, cracker, and a small portion of ginger, all finely pulverized and wet with a strong tea made of raspberry leaves, form as good a preparation as probably can be devised. The poultice will require to be wet occasionally, and when the parts are suppurating freely, a fresh one must be applied daily until the suppuration is completed, when a salve must be employed to shield the parts from the air until they are healed. When granulations shoot up, forming what is termed proud flesh, they should be covered with burnt alum, or finely powdered marsh rosemary before the salve be put on.

Where parts are scalded under clothes, and the clothing cannot be removed without breaking or removing the skin, it should remain on, keeping the parts wet with alcohol and water, or with simple cold water, and not removed for several hours, unless the clothing prove a source of irritation to the parts. After the pain subsides through the continued application of evaporating lotions, the clothing over the burn may be saturated with some one of the ointments above mentioned, in order to exclude the air.

Constitutional Treatment.—Severe burns or scalds generally occasion great prostration of the powers of life, manifested by chilliness, coldness of the surface, extreme prostration of strength, a weak pulse, and sometimes stupor or delirium. Under these circumstances stimulants and emetics must be given. If an individual receive a severe burn or scald soon after taking a hearty meal, the food will not be digested, and if not thrown off by vomiting, it will oppress the vital powers. It is always safe, and

generally highly necessary, to give an emetic after a severe burn or scald. The best form of emetic for all cases where the vital powers are prostrated, is the liquid of the third preparation of lobelia, or the lobelia powder, steeped in strong composition or bayberry tea, adding a portion of cayenne pepper or No. 6.

STIMULANTS. — Stimulants, such as here recommended, given internally. will not aggravate a burn or scald on the surface. By giving stimulants we aid the constitution in maintaining the natural equilibrium of nervous power between the great centres of the system and the surface of the body, which is an important indication in the treatment of all forms of disease, whether general or local. The stimulants to be employed are capsicum, composition, or ginger tea. These stimulants may be given at all times; and when there is fever, broken doses of lobelia should be added to them, or taken separately; and if the skin be very hot and dry, bathe it with vinegar and water, or spirits and water, to reduce its temperature down to the sweating point.

VAPOR BATH.—There is no objection to the use of the vapor bath in cases of scalds and burns, the parts being kept covered by the dressing during the steaming. When the patient remains in a torpid or sunken condition, or the burn or scald becomes very painful after the lapse of a day or two, or at any subsequent period after the first pain from the injury has subsided, the vapor bath will prove especially beneficial, not only in relieving the pain in the parts, but it will aid the healing efforts of the constitution. I recently attended an old lady who had her foot badly scalded, and not being treated properly in the first place, the dressing being frequently removed, the lymph which was thrown out by the raw surfare, designed to form a new skin, was taken off by the frequent changing of the dressings, and the scalded surface assumed an unhealthy appearance; the foot was extremely painful, which con continued for weeks with but little intermission, except when the parts were wrapt in wet cloths, and cold water applied. All the applications that were made to the foot failed of exciting the healing power, or to make any favorable change in the part until the vapor bath was resorted to; the foot was steamed from an half to three quarters of an hour at a time without any dressing on, and this repeated daily until a new skin was formed over the foot. This patient experienced more benefit from a general steaming than when it was merely applied to the foot.

To Prevent Deformity. — Great deformities are apt to take place after severe burns, when the true skin is destroyed. If, for instance, the palm of the hand and between the fingers be badly burned, the natural tendency in the parts will be to contract; the hand to be clenched and the fingers to unite together. This is to be prevented by binding a splint on the back of the hand, the splint being sawed at the extremity, so as to furnish a separate splint for each finger. The parts must be first dressed, and then the splint applied. Especial care must be observed to interpose dressing between the fingers to prevent their uniting together. I once witnessed a very painful and bloody operation on a man whose arm had grown fast to his side, in consequence of a severe burn, the proper care not having been taken to prevent the burned surfaces from coming together when healing. Severe burns on the neck are almost necessarily followed by more or less deformity. I have seen several cases where the chin was drawn down to the collar bone, the patients being unable to raise the chin from the breast. A severe burn on the inside of the arm, at the elbow, would naturally tend to bend the arm when healing; and if allowed to heal in this position, the patient will ever after be unable to straighten the arm. This deformity is to be prevented by applying a splint to the back of the arm, so as to keep the limb straight,

I have heard Dr. George M'Clellan relate a case of a child that was severely scalded over the greater part of its body, and the mother, in her fright, wrapped the child in carded cotton, a heap of which happened to be in the room at the time, which soon relieved the pain so that the child dropped asleep, and when the cotton was removed, the skin was not blistered. The doctor relates another instance of a boy who was severely scalded by falling into a soap-boiler's kettle, when some one in the establishment spread out a blanket, covered it over with soap fat and soot well rubbed together, laid the boy on the blanket, and then wrapped him in it. This dressing was not removed until a new skin was formed over the scalded parts, and the patient was soon well.— Comfort.

# TREATMET OF FROZEN LIMBS.

## SECTION XCIX.

When a part is benumbed or frozen, the most important indication in the treatment is to regulate the temperature around the frozen part, carefully guarding against warmth until the vessels recover sufficient strength to carry on the circulation. A frozen part should never be thawed by the application of external warmth, or it will be followed by violent inflammation if not by mortification. It would seem that the application of warmth to a frozen part, destroys the natural equilibrium of nervous energy between the great centres of the system and the surface of the body. In such cases the blood which is attracted to the surface by the warmth, is not circulated or returned back as it should be, a tendency to putrefaction or disorganization occurs, attended with violent inflammation, followed perhaps by mortification.

A part that is frozen must be kept in cold water, even adding snow or ice to it, and this continued until the parts are completely thawed, and then the temperature around the part should be increased very gradually, not allowing a sudden change from cold to warmth. Covering the frozen parts with snow is a good practice.

If a person besides having his limbs frozen should be greatly benumbed and chilled throughout the body—nearly frozen to death—he should not be taken into a warm room, but be laid in a room without fire. It would even be better that the patient remain in a barn than to be placed in a temperature much above that of the external air. I have heard a case related of a man frozen severely and stiff, who was restored by being placed in a cask of pickled cabbage, commonly called sour-crout.

STIMULANTS must be given to support the living powers. Cayenne pepper, composition, ginger tea, carbonate of ammonia, warm brandy toddy, and No. 6 in warm water may be employed as stimulants; and wine whey, essence of beef or chicken tea may be given as nourishment, until the powers of digestion are increased

so that other kinds of food can be digested. Stimulating injections will aid in restoring animation.

When a part of a limb is frozen without the body being very much benumbed with cold the patient may remain in a comfortably warm room, observing the precaution to keep the frozen part in cold water, or enveloped in snow, until it be thawed; and then the parts may be wrapt in cloths kept damp with whisky, alcohol, spirits of camphor, or vinegar. A most important indication in the treatment of frozen parts is to "keep down the outward heat" of the injured parts, or a stagnation of the blood in the parts will be the consequence. When through improper management in the first place or from other causes, a part that has been frozen becomes inflamed, threatening mortification, a poultice must be applied, composed of elm, white pond lilly, cracker and ginger; the poultice to be kept wet with cold water, and the limb elevated. The yeast poultice mentioned in the materia medica may be employed. The patient should also be placed under active constitutional treatment, in order to aid the efforts of nature. A full course of medicine should be administered and frequently repeated in all cases where mortification is threatened, and stimulants given freely to excite the secretions, and increase the power of action in the enfeebled vessels, thus lessening the tendency to conjection of blood in the parts. It is common in the old practice to prescribe bark and wine in cases of mortification; such remedies, however, when the secretions are suspended, the tongue being dry and the skin dry and harsh, will necessarily prove injurious. But if a patient in the condition above described, be carried through a course of medicine, and followed by a free use of cayenne or composition tea, adding small doses of lobelia, the symptons will generally assume a more favorable aspect, and certainly never be aggravated by it.

Tonics.—There is a condition of the system when barks and wine will prove of great benefit in cases of mortification, or in cases of recovery from the effects of freezing. When the tongue is cleaning, and moist and the surface of the body inclined to moisture, tonics may be given freely. Peruvian bark, quassia, columbo root, Virginia snake root, balmony, golden seal, quinine,

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poplar bark, or spice bitters, may be employed either separately or combined together.

DIET.—The diet in mortification should be of the most nourishing kind, provided the digestive powers be not too far prostrated. When the tongue is dry and parched and the patient is feverish, gum arabic or slippery elm mucilage, essence of beef, barly water, &c., will be the most suitable. But when the tongue is moist and cleaning, the skin warm and relaxed, the patient may take eggs, beef steak, mutton, chicken, wild game, custards, milk boiled, milk porridge, &c. In some cases of extreme debility, wine, whey and even wine may be given. No. 6 taken in warm water sweetened is an excellent tonic and stimulant.

### BILES.

#### SECTION C.

THEATMENT.—In the earlier stages of biles warm fomentations and poultices are required to soften and relax the parts and to favor suppuration.

The core of a bile consists of dead cellular tissues, and inflammation is necessary to bring on suppuration or the absorption of the parts surrounding the dead cellular tissue, in order to separate it from the living parts. It is therefore better to avoid opening a bile too soon, as that may interfere with the operations of nature, and retard rather than hasten the cure. There is a time, however, when a bile should be opened and not allowed to break spontaneously, or it may destroy so much of the skin as to leave a large scar.

After a bile has been opened the parts must be poulticed until the swelling and inflammation subside. In all running sores it is better to have a poultice spread on oiled silk, or something that will prevent evaporation. As a general rule poultices should be made more stimulating after an abcess or bile is opened than before, and if the parts be much relaxed and colder than natural, equal por-

tions of composition powder and slippery elm will form a very good poultice.

Washing or syringing the cavity of biles with a strong tea of bayberry or sumac, adding a portion of No. 6, is very useful, it promotes granulation and assists the healing action.

When the matter is discharged and the swelling in a great degree disappeared, poultices may be laid aside and salve spread on soft muslin or linen substituted, and wash the sore occasionally with the tea above mentioned. When the cavity of the bile is obstinate in healing, No. 6 may be poured into it, or wet a piece of lint with the drops and let it remain in the sore, applying a salve over the parts.

Constitutional Treatment is not required in common cases of biles, except it may be to lessen pain by relaxing the system or with a view to prevent other biles. Biles very often occur after scarlet fever, measles and small pox.

### CARBUNCLE.

### SECTION CI.

The carbuncle never occurs in a healthy constitution. It may arise from the same cause that produces biles, but instead of healthy inflammation observed in case of a bile, terminating in the formation of what is termed healthy or laudable pus, it assumes an unhealthy character accompanied by burning pain. The swelling assumes a dark red or livid appearance, and instead of pus being formed or contained in a single cavity and with a core in the centre, as in the case of a bile, the swelling becomes soft and feels spongy and small vesicles or belbes are formed on the skin as in erysipelas, and an acrid fluid is discharged from numerous openings or small ulcers on the parts. The fluid which escapes resembles a mixture of flour and water; the small ulcers run together and form openings sufficient to allow portions of the dead cellular tissue to escape resembling shreds of tow or cotton.

The cheek, neck, and back are the parts most liable to carbuncle.

Carbuncle is not in general dangerous, yet it is slow in its progress, and difficult to cure.

TREATMENT.—The local treatment in the first place should consist of warm fomentations and poultices. Experienced surgeons advise the early opening of the carbuncle, and applying a poultice made of port wine and ground flax-seed. A poultice of composition and elm, or of yeast and ginger may be used in the place of the port wine poultice. Syringing the cavity with strong bayberry tea, and then pouring in a portion of No. 6 will be of especial benefit in exciting a more healthy action in the parts. Local steamings will also aid the lining parts to cast off the dead cellular tissue.

Constitutional treatment will be required in all cases of carbuncle, employing every means to correct the diseased condition of the general health, and to strengthen and support the constitution. In the first place the patient must be carried through a full course of medicine every few days and during the intervals use freely of composition, pepper or spice bitters. As the constitutional symptoms wear a more favorable aspect, cleaning of the tongue, a general warmth through the body, with a moist skin, then tonics, such as bark and wine, quinine, gentian, columbo, and Virginia snake root must be given freely, and the patient allowed a nourishing diet, eggs, milk porridge, custards, beef steak, mutton chops, boiled chicken, wild game, stale bread, cream, toast, &c.

FRESH AIR.—When the state of the weather and the condition of the patient will admit of it, he should ride or walk out to receive the benefit of fresh air and exercise, observing especial care, however, to keep warm.

# ABSCESS OF THE FEMALE BREAST.

### SECTION CIL.

Gathered breast, as it is commonly termed, is chiefly, though not exclusively restricted to females after confinement. It is generally occasioned by a large accumulation of milk, exposure to cold,

or from sore nipples. The frequent exposure of the breast to the air more especially when the skin is covered with perspiration is a common cause of gathered breast.

TREATMENT.—As soon as the breast begins to be hard or painful from too great flow of milk, it should be bathed frequently with some evaporating lotion, whisky, brandy, warm vinegar or spirits of camphor and water, or cloths applied and kept moist with some one of the above articles. This will lessen the secretion of milk. But if the breast cakes and becomes painful and cannot be eased by the means above mentioned together with frequently drawing the breast, it should be steamed frequently, and covered with a plaster of salve, to keep the skin soft and moist. A hole must be cut in the centre of the plaster to admit the nipple. When a lump is formed in the breast from taking cold in the part or from irritation of the nipple, steaming the breast frequently and applying a plaster of salve, or a poultice composed of equal parts of green lobelia and elm, if early applied will generally prevent suppuration, easing the pain and scattering the swelling.

If the system be much disordered, an emetic or a course of medicine will prove beneficial in removing obstructions in the breast, and preventing suppuration. Placing the patient under the influence of lobelia given in broken doses so as to occasion slight nausea will be useful in moderating pain in the breast, and by the relaxation thus produced will aid in removing obstructions.

If the use of the above means fail of discussing the swelling and the breast continues to be very painful and throbbing, warm poultices must be applied with a view to favor suppuration and to bring the matter as speedily as possible to the surface. When suppuration is about to take place there is a severe throbbing pain in the part, and the patient experiences chilliness, and a blush appears on the skin covering the swelling.

It is better to delay opening a gathered breast until the matter approaches near the surface. After the abscess is opened or breaks spontaneously a poultice composed of composition and elm or flax-seed; or of elm, white pond lilly and ginger must be applied, and the poulticing continued until the discharge of matter has nearly ceased,

when the parts may be covered with some kind of salve, and moderate pressure applied to favor the union of the sides of the cavity.

### WHITLOW OR FELON.

### SECTION CIII.

Whitlow is an extremely painful swelling, mostly confined to the fingers, and particularly to the middle or last joint, or it is seated under the nail.

This painful affection often becomes protracted in duration in consequence of pus or matter being formed beneath the tendons, or under the membrane that covers the bone, requiring a considerable length of time for it to find its way to the surface.

Causes.—Felon or whitlow is sometimes caused by a bruise, in other instances it is occasioned by a slight wound on the skin; even the scratch of a pin, if frequently irritated or not protected from the air may affect the parts near the bone and produce a felon. Occasionally it comes on without any appreciable cause.

TREATMENT.—In the outset of a felon, placing the hand in alcohol, brandy or vinegar, and continuing it several hours at a time, and afterwards wrapping the finger in cotton kept wet with spirits of camphor, alcohol, or vinegar will sometimes prevent the formation of matter. And even though it should fail of preventing suppuration it will mitigate the pain. A plaster composed of lime and soft soap, is a favorite remedy with some for whitlow or felon.

If the swelling continue to increase attended with severe throbbing pain, the above or some other form of poultice must be kept on the parts, wetting it occasionally as it becomes too dry, and when there is evidence of the existence of matter in the part, it should be opened, either with a lancet or in the way Dr. Thomson recommends, which is, to burn pieces of spunk about the size of a large pea, on the part until the flesh becomes deadened down to the matter, and then open it. When this method is employed the hand and the diseased finger except the part on which the spunk is to be burned should be held in cold water during the operation. A pair of forceps or tweezers may be used in setting fire to the spunk and placing it on the finger. Dr. Thomson does not advise this plan of burning spunk upon the part, until there is a purple appearance in the part indicating the approach of matter towards the skin.

Another plan recommended by Dr. Thomson to facilitate the approach of the matter to the surface is to slack a small piece of lime on the finger. In doing this the hand should be placed on wet cloths, and a small roll of the same placed at each side of the finger to prevent the lime from falling off. A piece of unslacked lime about the size of a shellbark nut is to be laid on, then wet, and allowed to remain as long as the patient can bear it, or until it becomes cold. This may be repeated occasionally until there is some appearance of matter, when an opening should be made.

Before an opening be made, any kind of emollient poultice may be applied to favor suppuration: but after pus begins to be discharged a stimulating poultice must be employed. Equal portions of slippery elm, white pond lilly, and ginger form suitable compound for the poultice. Indian mush, flaxseed stewed in milk, or any other soft substance may be employed, adding a portion of cayenne pepper or ginger. During this stage of the felon the poultice should be spread on oiled silk, or a piece of bladder to prevent evaporation.

When the swelling and inflammation has in a great degree disappeared, poulticing may be omitted, and Thomson's healing salve applied.

When matter is discovered under the nail, a portion of the nail

must be cut away to allow the pus to escape.

When an opening is made by a lancet in the earlier stages of a felon, the matter being deeply seated, care must be observed to avoid cutting open a joint. A lancet may be safely introduced down to the bone, except immediately at the joint.

Constitutional Treatment.—The pain attending a whitlow or felon, may be mitigated by using means to excite perspiration and by placing the system under the influence of lobelia, given in broken doses, to the extent of producing slight nausea.

If the system be much disordered an emetic or a full course of medicine will be especially beneficial. Patients may sometimes procure sleep by having the hand raised upon pillows, and taking tincture of lobelia in sufficient quantities to cause slight sickness.

## HIP DISEASE.

### SECTION CIV.

DISEASE of the hip joint is of very common occurrence, and although it prevails most among children, still the disease not unfrequently attacks adult persons.

Causes.—Although the hip disease be occasioned, in many instances by a fall, yet it rarely happens in persons of sound and vigorous constitution. A bruise upon the hip, that occasions scarcely any inconvenience to one of a healthy constitution, would be liable to cause the hip disease in one of feeble organization, or who is of a scrofulous constitution.

Symptoms.—In the majority of instances of hip disease the first thing of which the patient complains is a pain in the knee. The pain is in some cases slight at first; in other instances it is severe from the commencement, preventing the patient from sleeping at night, except at short intervals. The patient is observed to limp, and the knees become bent. As the disease advances the patient complains of severe pain about the hip or groin, yet in some cases the pain is almost exclusively confined to the knee during the whole progress of the disease.

DURATION OF THE DISEASE.—The hip disease is usually slow in its progress, seldom terminating its course in less than a year. Occasionally under favorable circumstances and a proper course of treatment, the parts resume a healthy condition in the course of a tew months; but, unfortunately, in the great majority of cases, the disease continues for years, though seldom attended with severe pain, except at intervals, and more especially in the early stage, and when suppuration is about to take place.

TERMINATION. - Few patients recover from the hip disease without more or less distortion of the limb of the affected side. Sometimes the inflammation of the joint terminates in resolution; still this is of very rare occurrence, for the parts possess so low a degree of vitality that the restorative efforts of nature are insufficient to prevent disorganization of the diseased parts in unhealthy constitutions. A part of the body that is well supplied with red blood, will recover from disease much more readily than parts which receive but a small supply of arterial blood. Hence the tissues about the joints, receiving very little red blood, are very slow to recover from disease; most commonly the inflammation terminates in suppuration about the joint, the matter taking different directions, sometimes pointing to the surface in the region of the joint; in other instances the matter travels down into the groin forming a fluctuating tumor, or it may pass down the thigh, sometimes almost to the knee. In most instances the parts finally heal, but the joint remains stiff, and the limb shortened. The head of the thigh bone is sometimes entirely destroyed, leaving the limb several inches shorter than the sound one. In very feeble constitutions the disease sometimes terminates fatally, the powers of the constitution being worn out by disease.

TREATMENT OF HIP DISEASE IN ITS EARLY STAGE.—In the outset of this disease the means chiefly to be relied upon, are the vapor bath, rest, stimulating applications, occasionally an emetic, broken doses of lobelia, and warm teas to promote perspiration.

The Vapor Bath may be administered daily during the early period of the disease. When the patient has been steamed twenty minutes or half an hour, he may be showered with moderately cold water, rubbed dry and bathed with vinegar or spirits. After the bath the hip must be covered with stimulating ointment, or with salve to which a portion of pepper has been added. The parts should then be covered with oiled silk, or a rabbit skin or buckskin, to promote perspiration and keep the parts warm.

REST is very important in the early period of the disease. A splint carved or moulded to fit the limb in a straight position or nearly so, may be applied with benefit in the early stage of the disease. It will not only favor the cure, by keeping the joint at

rest, but may prevent deformity of the limb, provided the disease terminate without the occurrence of suppuration. After the disease becomes permanently fixed, then to confine the patient with a splint will be useless or even injurious; he should be allowed to use crutches, and when the weather will permit, to have the benefit of the open air.

Emerics must be given whenever the condition of the patient demands their employment; it is in the early period of the disease, however, that they are more particularly indicated. The proper time for giving an emetic is shortly after a vapor bath has been administered. If the patient be very feeble and pale, the emetic of lobelia should be combined with stimulants, as composition, pepper and bayberry, or with No. 6 and bayberry. There is no period of the disease when an emetic will not prove of benefit, if the stomach be foul, or when the patient is suffering severe pain.

Broken doses of Lobella must be given frequently in the early stage of the complaint, more especially if the disease be attended with severe pain or fever. Warm teas of pennyroyal, mint, and ginger may be taken to promote perspiration.

IN A MORE ADVANCED PERIOD OF THE HIP DISEASE, it will be useless, as before mentioned, to keep the parts at perfect rest, or to confine the patient by the use of a splint; neither will it be necessary to give much medicine, except occasionally as the condition of the patient demands it. Cleanliness, fresh air, nourishing diet, salt water bath, or sponging the body with salt water, and friction of the surface, are chiefly to be relied upon when the disease has become permanently fixed. When the parts are painful, however, or the general health disordered, medicine must be employed.

When suppuration takes place, an abscess may be formed at the hip, or the pus may pass down into the thigh, forming a fluctuating tumor there. All experienced surgeons now agree that abscesses about the hip should not be opened until at a late period, or when the matter comes so near the surface as to threaten the destruction of a considerable portion of the skin, when it is better to make a small opening with a sharp lancet, drawing off only a part of the matter at a time, and then closing the opening with a piece of adhesive plaster.

Abscesses in the thigh often contain from half a pint to a quart of pus, which being secreted at the hip joint, passes down between the muscles, and thus collects in the thigh. Where an abscess is formed in a part thus remote from the joint, it may be opened with safety.

When pus is discharged, either spontaneously or by opening the abscess, every means should be employed for sustaining the patient's strength; and the use of tonics, nourishing food, exercise in the open air, salt water bathing, a change of residence, for instance, from a city to the country, to the sea board, or to a mountainous or pine country, should be resorted to.

Sick children are apt to be indulged in eating sweet cakes and various kinds of dainties between meals, which impair digestion and destroy the natural appetite; and although the patient have the gratification of eating a sweet cake, he loses not only the enjoyment but the benefit of a meal. When patients who are recovering from sickness, and more especially children, require food between meals, it should consist of such articles as milk porridge, toast and milk, crackers, stale bread, custards, or crust of bread.

Pepper Poultice.—In the earlier stages of the hip disease, and also after an abscess has formed, and where matter has been discharged, and the parts remain in a pale and flaccid condition, a poultice composed of equal portions of cayenne pepper and slippery elm powder may be applied occasionally with decided advantage.

WARM FOMENTATIONS.—In the earlier stage of hip disease, when the parts are painful, besides administering vapor baths, bags of hops, or of bitter herbs, wet with hot vinegar, may be applied to the hip, and kept warm by hot bricks or bottles of hot water.

Pressure.—Whenever the hip will bear pressure without occasioning pain, it must be applied, with a view to support the enfeebled and relaxed vessels. This may be done by a bandage of flannel or of muslin, put around the hip. After pus has formed and discharged, or the parts are still secreting matter, pressure

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should always be applied, in a degree suited to the condition of the parts.

Children who inherit scrofulous constitutions are in general favored with superior intelligence, so that although they may be physically weak, yet superiority of mental power enables them to pursue professions which require intellectual rather than muscular strength. It must be borne in mind, however, that children of scrofulous constitution will not bear close confinement in crowded school rooms without materially injuring their health. It is better in such a case that their education be neglected in early life, and

that they receive the benefit of the open air, which will prove the most effectual means of improving the constitutional health.

## WHITE SWELLING.

#### SECTION CV.

The knee joint is observed to be more frequently affected with white swelling than any other of the joints. It seldom happens in others than in those of feeble constitution, and more especially in the scrofulous. The hip disease so prevalent among children of bad constitutions is a disease of the same character as white swelling. The hip disease prevails mostly in children under twelve years of age, whereas white swelling is most prevalent in adults.

CAUSES.—The most frequently exciting cause of white swelling is exposure to cold. A person of a sound constitution may bear an exposure to cold without that inconvenience which would occasion such a degree of debility in one of scrofulous constitution as to cause white swelling.

When the vitality of a part is reduced below a certain point, the constitution establishes inflammatory action with the design of sustaining the vitality of the part. Thus the membrane that lines the cavity of the knee joint, by the influence of cold, may be so far deprived of its vitality, as to call upon the constitution for an

increased supply of blood in order to prevent the death of the parts, and to repair the injury already sustained in the affected parts. A new supply of blood is sent to the knee, an inflammatory action is established which under favorable circumstances may terminate in resolution—the parts being restored to a healthy action. Under circumstances less favorable, the inflammation may terminate in adhesion—the joint being stiffened, but without any destruction of the parts. Under circumstances still less favorable, for instance where the constitutional health is very bad, or the vitality of the diseased parts reduced beyond the power of reparation, then suppuration of the parts will take place, matter will be discharged, and the disease necessarily become of long continuance and extremely painful. Portions of bone are destroyed in many instances by the process of absorption.

TREATMENT.—The indications for the cure of white swelling are to correct and support the general health, and to employ such local means as will aid in bringing the inflammatory action in the diseased parts to a favorable termination—either in resolution, or anchylosis (stiffening of the joint) or if suppuration occur, to favor the occurrence of adhesive inflammation and stiffening of the joint which will be the only "safeguard of the patient," after suppuration has taken place.

An occasional course of medicine should be administered in the earlier stage of the disease, or at any period when the patient is suffering severe pain.

Besides the course of medicine the spice bitters should be taken two or three times a day, and a dose of composition and of bayberry and pepper at night. These remedies, however, may be given in a different form, to suit the fancy of the patient. Thus the No. 3 pills will supply the place of the bayberry and pepper, and when the tongue is dry the compound lobelia pills will be appropriate.

Injections moderately stimulating, and containing a portion of lobelia, will be useful not only to assist the action of the bowels, but by the influence which they exert over the circulation of the lower extremities. An injection of composition tea, adding a portion of lobelia powder, retained fifteen or twenty minutes or

allowed to remain in the bowels, will seldom fail of relieving pain in the diseased limb, and it will also in many instances cause free vomiting.

Tonics.—In a later period of the disease, and more particularly where suppuration has taken place and the parts are discharging matter, bitters may be employed with a view to strengthen the digestive powers so as to allow the patient to take nourishing food to support the constitution in her curative efforts. In the earlier stages of the disease, composition, pepper, spice bitters and lobelia are generally indicated, whereas in its more advanced stages, tonics, syrups, generous diet, fresh air, and gentle exercise are called for.

LOCAL TREATMENT.—In the earlier stages of white swelling and all affections of this character steaming and fomentations will be found beneficial. The steam may be applied for half an hour or even an hour at a time, and after this the stimulating liniment may be applied to the parts, and then bind them up in oiled silk or flannel. The limb must be kept warm and at rest. In the place of applying the steam in the usual way, the patient sitting in a chair, a bag filled with boiled potatoes, or with hops wet with vinegar, may be kept to the parts constantly, keeping a hot brick to the bags, or have two and change them so as to keep one constantly warm to the parts. This latter method is generally to be preferred, as by it a regular warmth may be applied many hours, or even days, without putting the patient under the necessity of sitting up.

Bandages.—Even in the earlier stages of white swelling, moderate pressure will be beneficial, provided it can be applied without occasioning too much pain. If the disease be in the knee joint, the limb must be bandaged from the end of the foot to the knee, first applying stimulating ointment, No. 6, or pepper sauce.

Dr. Thomson's Poultice for White Swelling.—Take fresh comfrey root and scrape or grate it fine until you obtain half a pint. To this add the white of two or three eggs well beaten, and a gill of brandy, or sufficient to make it of a proper consistence for a poultice; spread this and bind it on the affected parts as firmly as can be borne, renewing it as often as it becomes dry.

When the parts suppurate, the disease becomes extremely painful and protracted in some cases to several years duration. In severe cases the constitution may become exhausted, the patient sinking under the effects of the disease.

In treating this and every other disease attended by inflammation, it should be borne in mind that inflammation is not the first change in the parts from a healthy condition. Coldness and loss of vitality in the part is the first change from a healthy state, and inflammation follows as an effort of the constitution to preserve the vitality of the parts, and protect the joint from destruction; and although these efforts are frequently baffled from want of constitutional energy, or from great debility of the parts diseased, still the design of the inflammation is the same, and the treatment should be directed to correct and support the general health and to promote the circulation in the diseased joint by the various means already mentioned.

## UNHEALTHY ULCER.

### SECTION CVI.

An unhealthy ulcer may be extremely irritable, inflamed and painful; or it may be indolent and almost devoid of sensibility. In aged persons a bruise upon the skin is apt to occasion an unhealthy ulcer, "the parts being too weak to carry on the actions necessary to its recovery."

A great diversity of appearances are presented by unhealthy ulcers.

"THE IRRITALE ULCER is generally characterized," observes Dr. Gibson "by the following appearances: The edges of the sore are ragged, undermined, and sometimes almost serrated. The parts for some distance beyond the ulcer are red and inflamed and often edematous. Irregular hollows occupy the bottom of the ulcer, and contain a thick greenish or reddish matter, which is so extremely acrid as to excoriate the adjoining skin. In place of gran-

ulations may be found a white or dark red spongy mass, extremely painful and shedding blood upon the slightest touch."

"Inflamed Ulcers.—Here you have a serous discharge from the sore; a bloody ichor, composed of scrum and the red particles of blood; a disposition in many cases to slough; the surface covered with a brown incrustation, and the skin and surrounding parts highly inflamed."—Castle's Manual of Surgery.

"Gangrenous Ulcers.—In ulcers of this kind, the surface is perfectly free from any discharge; the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

Indolent Ulcer.—This is the most common kind of ulcer. The edges of the sore are raised, and rounded, giving the appearance of a deep cavity to the ulcer. The surface of the sore is covered to a greater or less extent with a slight colored crust, and is extremely insensible to the touch. In general there is a free discharge of a tenacious matter from the sore, differing essentially from healthy pus. This kind of ulcer is in almost every instance seated on the leg, and the nearer it is to the ankle the more difficult it is of cure.

TREATMENT OF UNHEALTHY ULCERS.—Constitutional treatment is in general necessary in the cure of unhealthy ulcers, besides its influence in exciting a healthy action in the vessels of the diseased part; a proper course of constitutional treatment secures the constitution from the bad consequences that might otherwise ensue from the healing of long standing ulcers. I have known ulcers of many years standing, to be entirely healed in a short time, under Thomsonian treatment, and the general health of the patient still continue to improve.

Unhealthy ulcers will in many instances be observed to assume a more healthy appearance, after the patient has been carried through a course of medicine. In cases of long standing the vapor bath and emetic, or a full course of medicine will be required to be administered as often as every week or two, and repeated several times, together with the daily use of stimulants, capsicum, composition, anti-canker medicine, and tonics, and a proper course of

local treatment, before the sore will assume a healthy condition, and secrete the cream-like pus, observed in healthy ulcers.

In confirmed drunkards, ulcers are often very difficult to heal; constitutional and local treatment proving ineffectual, so long as the habit of excessive drinking is continued in.

Besides an occasional course of medicine, the following plan of giving the medicine (first proposed to me by Dr. A. C. Logan) I have found well adapted to almost every case of chronic disease, namely: A dose of Thomson's anti-canker medicine in the morning before breakfast, a dose of No. 4 bitters before dinner, and composition at bed-time. If the bowels be costive, from three to six of the compound lobelia pills should also be taken at bed-time.

Dr. Logan's Alterative Syrup.—This syrup is made by combining equal portions of tincture of lobelia, No. 6, and simple syrup of sugar. To be taken in doses of from one to two or three teaspoonsful, repeating the dose several times a day, but particularly shortly after or within an hour or two after meals. The use of this syrup fulfils many important indications for improving the general health.

SARSAPARILLA SYRUP.—In mercurial syphilitic, or scrofulous ulcers, the simple syrup of sarsaparilla, or a syrup made of a compound of sarsaparilla, guiac shavings and yellow dock root, will be found useful.

Local Treatment in Unhealty Ulcers.—In the first place, stimulating and astringent washes and poultices must be employed to stimulate and give tone to the enfeebled vessels; and when the ulcer has begun to secrete thick yellow or cream-like matter, and healthy granulations are formed upon the surface of the ulcer, then fresh salve may be applied; or shave the hair from the skin around the ulcer, and apply strips of adhesive plaster, which should encircle about two-thirds of the limb, pressing the edges of the ulcer towards each other when the adhesive straps are put on, and leave small interspaces between the straps, for the escape of pus or whatever secretions may be formed. If the ulcer be on the leg, the limb should be bandaged, commencing at the end of the foot and extending the bandage above the ulcer, so as

to apply moderate and equal pressure to the limb. This will, in general, enable the patient to walk out, or to pursue his daily avocation, the bandage furnishing support to the blood vessels and aiding them to carry on the circulation.

Indolent ulcers may require actively stimulating poultices, such as a compound of cayenne pepper, bayberry and elm, or of composition powder. Dr. Samuel Thomson informed me that he had cured indolent ulcers by applying the dry powder of cayenne pepper, brown lobelia and bayberry, and then administering a course of medicine.

Another plan of treating unhealthy ulcers, is to fill the ulcer with bees-wax and Burgundy pitch melted together and applied as warm as the patient can bear. This is to be bound on, and renewed as often as may be required.

Change of Remedies.—Every one who has treated ulcers of long standing must have observed the utility of occasionally changing the local treatment. An application that will answer well at one time may prove useless, or even worse than useless, at another.

THE EXTRACT OF RED CLOVER (Thomson's cancer balsam) has been highly recommended by some practitioners of the old school as a valuable remedy in indolent ulcers. The extract of sheep sorrel may be used for the same purpose.

It must be borne in mind, however, that in cases of long standing sores, a course of medicine should be administered and repeated if necessary, in order to prevent any bad effects that might otherwise arise from the healing up of ulcers.

To prevent a return of Ulcers.—When an old sore has healed the part should be bound in flannel, wetting it every day with No. 6. The flannel will not require changing, as the myrrh will prevent its becoming in the least degree offensive. Benjamin Thomson, formerly of Boston, showed me a flannel bandage that he had worn around his shin two years, and by having it wet occasionally with No. 6, it was entirely devoid of offensiveness, and afforded a protection against ulcers, of which he had been many years subject to.

GANGRENOUS ULCERS .- "In ulcers of this kind, the surface is

perfectly free from any discharge, the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

TREATMENT.—Where a part is threatened with gangrene or mortification, the yeast poultice should be applied, and the patient carried through a course of medicine, followed by the free use of cayenne pepper tea, third preparation of lobelia in bayberry tea; the compound lobelia pills, ginger or composition tea. As nourishment, give wine whey, essence of beef, or any other kind of nourishing food that may suit the condition of the stomach.

It the parts be excessively hot and inflamed, the poultice may be kept wet with the tincture of lobelia, simple water, or with wild indigo root tea.

ULCERS ARISING FROM DISEASE OF THE VEINS.—The veins of the leg are more liable to disease than veins in any other part of the system, giving rise to the formation of ulcers along the course of the larger veins. The circulation of the blood being impeded or obstructed by the diseased condition of the vein, adhesive inflammation is established, forming a small tumor under the skin; the skin over the tumor is observed first to roughen and peel off, and then a crust is formed, and finally an ulcer breaks out. These ulcers may, in most instances, be healed without great difficulty, but the vein continuing diseased, new ulcers are formed, and in this way they may continue to break out until by frequent ulceration the vein becomes obliterated, when the ulcers will cease to return.

TREATMENT.—Besides adopting the usual means for restoring the general health, when it is disordered, the limb upon which the ulcer or ulcers exist must be accurately bandaged from the foot to the knee, or a laced stocking worn, for the purpose of supporting the debilitated veins of the leg and to assist them to carry on the circulation, by which the tendency to obstruction will be lessened.

In the selection of local application for the ulcer, we must be governed by the circumstances of the case. If the parts around the ulcer are swollen and inflamed, poultices must be applied until the inflammation subsides, when fresh salve may be substituted. When the ulcer is slow in healing, finely pulverized bay-

berry, alum root, or marsh rosemary should be put into the ulcer dry, every time it is dressed, and salve spread upon oiled silk or a poultice applied.

FRICTION.—Rubbing the limb briskly every morning and evening may prevent the formation of new ulcers by removing obstruc-

tions to the circulation of the blood in the veins.

REST AND POSITION.—When the ulcer is in an irritable condition, and the parts surrounding it swollen and inflamed, the patient should refrain from walking much, but keep at rest, with the affected limb elevated on a chair while sitting up. If the patient have been affected a considerable length of time with this form of ulcer, it may be worse than useless to confine himself to the house, provided the condition of his general health and the state of the weather will permit of his going out. The limb must be bandaged or a lace stocking worn always, when the patient is walking about or pursuing his usual avocation.

Steaming.—In many instances benefit will arise from steaming the legs occasionally when affected with varicose ulcer. The vapour may be applied as hot as can be borne, and this continued from half an hour to an hour, or even longer at a time. After the steaming, the limb may be rubbed over with stimulating ointment.—Comfort.

## VENEREAL DISEASE.

### SECTION CVII.

The term venereal disease is applied to two forms of disease differing essentially in their general aspect. The one in the male consisting of an inflammation in the urethra, attended by a discharge of thick matter; whilst the other is an ulcer called chancre situated externally to the urethra.

GONORRHEA. — Symptons. — The first symptions are a burning sensation on passing water, accompanied with inflammation and a discharge of thick matter from the urethra. In the course of a few days the burning sensation on passing urine subsides, but the

inflammation and discharge of matter seldom disappear under eight or ten days, and very frequently continue many months.

In the *female* the symptome are much more obscure, and so closely resemble diseases arising from other causes than venereal poison that in many instances it is difficult to form an opinion as to the true character of the disease without having a history of the case, and even then an erroneous opinion might be formed by even experienced physicians.

It should also be borne in mind that men are liable to disease of the urethra resembling gonorrhea in many particulars, but arising from causes wholly distinct from that of gonorrheal poison. The peace of families has in some instances been destroyed, by a wife or husband being affected with symptoms resembling those attending the venereal disease, at the same time the accused party is entirely innocent. Instances have occurred in which symptoms of gonorrhea have occurred in men, in consequence of the wife being affected with a severe form of fluor albus or whites, each party accusing the other of infidelity.

Of the General Course of the Disease in the Male.—Under proper treatment and with great care and attention on the part of the patient in relation to diet, rest, &c., the disease will in many instances disappear in the course of a week or two. It often happens, however, that the disease is neglected in its first stage, the patient being unwilling to make his disease known; or he will not lie by without some plausible excuse for so doing, in order to evade suspicion, by which course the disease is often aggravated and becomes protracted to many months duration.

Where the general health is much disordered, and the patient of a scrofulous constitution, want of proper care and treatment, the use of improper remedies, or when the venereal poison has been of the more malignant character, the disease is very liable to become extremely harassing and painful. The inflammatory action in the urethra failing to overcome the disease, either from the debility of the parts, neglect, or from improper treatment, then it generally happens that lympth is thrown out in the parts along the course of the urethra, forming a hard cord, and when erections occur, as they often do during sleep, from the determination of blood to the parts,

it occasions what is termed chordee, which is so extremely painful that the patient is induced to jump out of bed and apply cold water to the parts, and this in many instances has to be repeated many times during the night.

These erections are not only extremely annoying to the patient, but they aggravate the symptoms and cause the disease to become more protracted in its duration.

Where the disease has been of long continuance, the patient is in most instances left with what is termed gleet, consisting of a slight discharge from the urethra of a transparent mucous, resembling the white of an egg, which is the effect of a weakened condition of the parts.

In the female the disease is much less troublesome; in many instances causing little inconvenience, and is also much more readily cured.

TREATMENT.—In the first stage of gonorrhea the patient should avoid using much exercise. His diet should be restricted to the lightest kinds of food, such as gruels, stale bread, toast and tea, &c. A gruel made of elm or of unbolted wheat flour are well suited to the early stage of gonorrhea. The digestive powers are in general more or less weakened during the early stage of the disease, and if food be taken that is hard of digestion, it will retard the cure. And again, if strong food, such as butter and meat, be used, the urine will be more acrid and irritating to the inflamed urethra.

When the general health is in a bad condition, or the patient feverish, or the skin dry and harsh, a course of medicine will be particularly serviceable; after which the patient should take every hour or two a small dose of lobelia, either in the form of tincture, powder, or in pills; drink freely of elm gruel, flax seed tea, barley or gum arabic water; and morning and evening take a teacupful of a strong decoction of sumac or bayberry. The teas should be taken warm, with the view to promote perspiration, which is of much importance in the early stage of the disease, provided the patient remain in the house.

If the bowels be costive they must be relieved by injections,

composed of composition, bayberry, or pennyroyal\_tea, adding a teaspoonful of the tineture or powder of lobelia.

External Applications.—During the first period of the disease, and particularly if there be much heat and an undue accumulation of blood in the parts, wet cloths should be applied and kept wet with warm water, and occasionally with the tincture of lobelia, or with alcohol, or whisky and water. This by preventing too great a collection of blood in the part will relieve the symptoms, and may shorten the duration of the disease. In many instances, however, the patient, to avoid suspicion and to conceal his unfortunate condition, continues to pursue his usual avocation, without applying the proper remedies, by which the disorder becomes aggravated and its duration very much lengthened.

In the early stage of the disease the tincture or a tea of lobelia dropped into the urethra shortly after passing water, will facilitate the termination of the inflammation.

In a more advanced stage of the Disease.—After the passing of urine ceases to cause burning sensations, then astringent and stimulating injections into the uretha will be useful; commencing with a simple tea of bayberry or sumac adding a small portion of the tineture of lobelia. In a still later period of the disease the discharge having been for some time profuse, a portion of No. 6 or pepper must be added to the tea in sufficient quantity to make a sensible impression on the urethra. I have known undiluted No. 6 to be used in some chronic cases for injections.

Balsam Copavia.—This article is much used for the cure of gonorrhea, and when pure and taken at a proper time, it is a valuable remedy. It should not be used in the first stage of the disease, nor until the inflammatory symptoms have abated. Neither should it be employed if the patient be feverish, the skin being hot and dry, the tongue coated, redder than natural and inclined to dryness. Under these circumstances the balsam is almost sure to disagree with the stomach. In general this medicine may be used to advantage in the course of ten days or two weeks from the commencement of the disease. If the symptoms do not improve under its use in the course of a few days it should be laid aside for

the time. The dose and methods of preparing may be seen in the materia medica under the head of balsam copavia.

Chordee, as it is termed, depends upon the deposition or extravasation of lymph in the parts along the course of the urethra, which feels hard like a chord. This condition of the parts occasions severe pain at times, more especially at night, compelling the patient to apply cold water to the parts to ease the pain. The local treatment for chordee consists in the use of fomentations and poultices. In the commencement of chordee, its further progress may often be checked by steaming the parts an hour or two by placing a hot brick in a basin containing a small portion of water, and sitting over the steam, or wrap a hot brick in damp cloths and place it as near the parts as can be borne, in bed. A poultice composed of elm, white pond lilly, and green lobelia, should be kept on the parts during the night and through the day applying salve spread upon oiled silk. The poultice should also be spread upon oiled silk to prevent evaporation.

When the patient is about his usual avocation, the compound lobelia pills may be taken three or four times a day. Camphor appears to have a beneficial influence in checking the symptoms of chordee. A piece of gum camphor the size of a large pea to be taken at bed-time, together with three or four lobelia pills.

After the symptoms of chordee have subsided the poulticing may be omitted; still some kind of salve should be used in the way above described.

Where the disease has continued several months, but unattended with chordee, the parts being in general colder than natural, then injections must be employed frequently, with a view to excite healthy action in the debilitated vessels of the mucous membrane of the urethra. Equal portions of bayberry and poplar bark tinctured in No. 6 form a suitable injection in cases of long standing gonorrhea or in gleet.

In females this disease is to be treated upon the general plan already described, except that the injections are to be administered to the vagina instead of the urethra. In females where the disease has continued several weeks, a sponge with bayberry or sumac tea and No. 6, should be introduced into the vagina, allowing it to re-

main two or three hours, and then changed for another, prepared in a similar way, and in this way continue these applications several days together, unless they be found to disagree.

SYPHILITIC SORE, OR CHANCRE.—This species of the venereal disease differs materially from the one just treated of. It usually commences with the formation of a pimple, surrounded by inflammation. As the disease progresses an open sore or ulcer is formed. termed chancre. When the chancre is seated upon the skin and does not advance more deeply, it may in general be cured without much difficulty; but when it is situated on the glans penis, it is more difficult of cure, or at least it requires a longer time for a cure to be effected. In individuals of depraved and filthy habits, and under other unfavorable circumstances, as where mercury is given, the syphilitic sore sometimes assumes a highly malignant character, occasioning extensive sloughing of the parts. The poison may likewise become absorbed and carried into the system, occasioning what are called the secondary symptoms of syphilis. swelling in the groin termed bubo, is a very common attendant upon chancre.

TREATMENT.—An important point to be kept in view in treating syphilis, is to prevent it from extending to the system. For this purpose no plan of treatment probably can be adopted with so much certainty of success as a course of medicine given every day, or every few days, in the commencement of the disease; and during the interval between the courses, to place the system under the influence of lobelia, taken in small doses; together with the use of composition and injections to regulate the bowels.

A course of medicine will not be necessarily required in every case of this disease, still its operation will prove beneficial in all cases, and in all stages of the complaint, and when the disease has a malignant character, it must not be omitted.

LOCAL TREATMENT.—The sore in the commencement should be poulticed with a compound of elm, white pond lilly, and lobelia powder, wet with the tincture of lobelia and spread upon oiled silk, bladders, or something that will prevent the poultice from drying rapidly; or if the sore be so situated that a poultice cannot

be applied to it, it should be wet with the tincture of lobelia several times a day.

When an open sore or ulcer is formed the poulticing should be continued, wetting the ulcer two or three times a day with No. 6, or with the liquid of the third preparation of lobelia.

Chancre is seldom cured under two or three, and very often it continues for six weeks.

Patients very naturally become dissatisfied with the treatment, and are induced, unless they discover a manifest improvement in the condition of the sore, to make a change, under the erroneous idea that they may find a remedy that will eradicate the disease in a few days. Dishonest and ignorant empirics, who advertise to make a speedy cure in all cases, are applied to, but failing to cure, others are applied to, and thus by frequently changing the treatment, the disease becomes aggravated and protracted much beyond what it would have been if it had been left entirely in the hands of nature. A man who advertises to cure the venereal disease in a short time, and without fail, may be set down at once as one who, depending upon the credulity of others for support, has sacrificed honesty and truth for motives of gain. The reason why the fail ures of these empirics are not more generally known, may be readily seen. No one who has the venereal disease will expose himself in order to expose those who have deceived him and fleeced him of his money.

The medical profession, though more honorable in general than the class above alluded to, have not as yet settled upon any general plan of treating syphilis. The opinion of the great guns of the profession concerning the effects of mercury in this disease, have been, and still are, extremely various. Formerly, it was believed that mercury was a specific for syphilis, not because it proved to be a specific, but because high authority had pronounced it to be such. More recently, however, this doctrine has been exploded by the highest authority in the profession, and the use of mercury not only declared unnecessary in the cure of syphilis, but pernicious in the extreme, unless given with the greatest caution. Professor Gibson, of this city, in his work on surgery, recommends the use of mercury in cases of chancre, but he now hon-

estly declares mercury to be altogether improper, tending to convert a simple chancre into one of a malignant or corroding character. P. Ricord, Surgeon to the Venereal Hospital of Paris, in a recent "Treatise on Venereal Disorders," in the course of his observations on the employment of mercury in chancre, observes: "By one party it is declared that no cure can take place, no repose be enjoyed, no future health anticipated, unless mercury be used, and by the other, future disease and death are predicted, if-this remedy be employed." "Again," observes the same writer, "Prejudice attaches us to the principles in which we are educated, and renders them objects of affection; and hence the obstinacy with which men cling to ideas with which they are familiar. The experience of the world has shown that partisans are sternly adhesive; that truth is more frequently imagined than perceived; that the value of a reason is too seldom accurately measured; and that minds satisfied with partial knowledge far outnumber the warm, conscientious lovers of philosophy. We can readily perceive the reason why men spurned the great principle promulgated by Rose and Thomson. It was a heavy blow aimed at a favorite and long-cherished opinion; but the truth will stand fast, despite the efforts of the boisterous declaimer, or the insidious endeavors of the smiling sophist. Rose and Thomson demonstrated an important truth; they incontrovertibly proved that mercury is not necessary to the cure of chancre as chancre; and this the intelligent, ingenious mind will acknowledge, however much it may dissent from their method of applying it."

When chancre is accompanied with a high degree of inflammation or swelling, the part should be steamed two or three times a day, and a moist warmth constantly applied, either by means of a hot brick or bottle of hot water wrapped in damp cloths. This course of treatment may be employed with advantage in any stage of the complaint. And when the disease wears a malignant aspect it must not be omitted.

When the ulcer has been discharging freely for some time, the sore should be filled every day with bayberry, marsh rosemary, or alum root finely pulverized put in dry, and the whole covered with salve spread upon oiled silk.

The ulcer is sometimes so situated that it cannot be reached except by injections; for instance, when its seat is on a part where the skin is drawn over, and swollen to such a degree that it cannot be drawn back. Under circumstances of this kind local steaming and warm fomentations must be employed, and the sore syringed often with lobelia tea, or tineture of lobelia; and if there be a free discharge of matter, bayberry tea must be employed, adding tineture of lobelia and No. 6.

Whenever a syphilitic ulcer is extending, it is necessary to apply active stimulants, as No. 6 and the third preparation of lobelia, with the view to excite adhesive inflammation in the cellular tissue to prevent the further extension of the ulceration.

When a chancre discharges matter freely, the dressing must be changed frequently, and every precaution used to prevent other parts from being inoculated with the poison; whereas, when the sore is in a healing condition, the dressing should not be removed oftener than twice in twenty-four hours. A good plan of dressing a healing sore is to cover the edges of the ulcer with salve, and to apply lint to the centre of the ulcer; the sore then may be dressed without disturbing the healing process going on at the edges.

The practice of destroying the syphilitic pimple or ulcer as soon as it appears, or within the first few days, by applying lunar caustic, is strongly advocated in a "Practical Treatise on Venereal Disorders," by Philippe Ricord, M. D., Surgeon to the Venereal Hospital of Paris. In the case of a pimple this writer recommends that it be cut open, and then apply the caustic, which should be pointed, when the sore is small, so that the bottom of it may be effectually cauterized.

Ricord states that if this treatment be applied early a chancre may usually be cured in eight or ten days, when it would require several weeks if left alone to run its course. If this declaration can be substantiated by experiment the practice should certainly be adopted. It generally happens, however, that a physician is not applied to in this disease until the lapse of several days or even weeks after its first appearance.—Comfort.

Bubo—Swelling in the Groin.—Both gonorrhea and syphilis are apt to occasion a swelling in the groin, termed bubo. When

a bubo is occasioned by gonorrhea, it very rarely suppurates; but when it arises from the absorbtion of syphilitic virus, suppuration is apt to take place.

TREATMENT.—Warm fomentations, volatile liniments, or lotions, and protecting the parts from cold, are all that will be required in the local treatment of bubo attending gonorrhœa.

When bubo occurs in one who has a syphilitic ulcer, the patient should keep in bed, and cotton wadding or soft muslin cloths wet with the tincture of lobelia applied to the parts, and retained by having a bandage placed around the hips, and another passing under the thigh over the groin and fastened to the hip bandage.

The patient should also be placed under constitutional treatment. A full course of medicine is the most efficient method of treatment that can be devised—it is suited to all cases, and to all stages; it harmonizes with nature, and aids her efforts to work off disease. The courses of medicine are to be repeated as the exigencies of the case demand. In the milder cases, unattended with much swelling or pain in the groin, or where the general health is not prominently disordered, a course of medicine may not be demanded; here the patient should be kept warm in bed, take the compound lobelia pills to the amount of from ten to fifteen pills every day; regulate the bowels by injections, and take a dose of composition, or of bayberry and pepper, two or three times a day.

When the swelling in the groin is very painful and throbbing, poultices must be applied with the view of favoring suppuration. The poultice so often mentioned, consisting of elm, ginger, white pond lily and cracker, may be employed, until the bubo is opened or breaks spontaneously, when a more stimulating and astringent poultice must be employed, such as equal portions of composition and slippery elm; or to the first mentioned compound add a portion of capsicum and bayberry, the poultice being spread upon oiled silk to prevent evaporation. If the parts do not heal readily the cavity of the bubo should be syringed every morning and evening with bayberry or No. 3 tea, adding a portion of No. 6. When the swelling has subsided, and the parts become relaxed, lint wet with No. 6 may be introduced into the cavity of the

abscess, and some kind of plaster applied to exclude the air from the parts.

Secondary Symptoms of Syphilis.—From the want of proper treatment of chancre, and more especially where the patient has been subjected to a mercurial course of treatment for the disease, the syphilitic poison may be absorbed and carried into the blood, and finally become seated either in the mouth, throat, nose, bones, or upon the surface of the skin.

When the disease attacks the roof or the mouth, an ulcer is formed, the bone is made bare and exfoliates, forming an opening between the mouth and the cavity of the nose, and changing the sound of the voice.

If the disease be seated in the tonsil, an ulcer is formed, presenting the character of chancre. When the mucous membrane of the nose becomes diseased by the syphilitic poison, the patient is very liable to lose some portion of the bones of the nose.

Sometimes the *secondary* symptoms of syphilis appear in the form of copper colored eruptions on the skin. These eruptions are slightly raised, scarcely ever painful, but are apt to itch, especially in the after part of the day.

"There is a greater variety of character in these venereal eruptions than in any other symptoms of the complaint; not only in appearance but also in size. In some you will find the eruptions of considerable magnitude, appearing as if a portion of copper colored skin laid upon the surface, but unattended with ulceration. In others you will observe deep ulcerations with a ragged edge; in a third, there will be scaly eruptions, covering very large surfaces in various parts of the body." Syphilitic eruptions are generally readily cured.

When the disease attacks the periosteum of the bones, "the patient experiences in the evening a sensation of pain in the bone, which afterwards becomes the seat of the *node*. The pain does not immediately produce a swelling; but in the course of a few days, a painful swelling appears in the evening, which disappears again on the following morning, and leaves no pain. At this time the periosteum (membrane that covers the bone) only becomes affected with inflammation; in a short time, a deposit takes

place between it and the surface of the bone; this deposit is, in the first instance, only a serous fluid, but a cartilaginous substance is soon secreted, which is gradually converted into bone, and is technically called a *node*.

TREATMENT OF THE SECONDARY SYMPTOMS OF SYPHILIS.—Whatever part may be the seat of the disease, the same [general constitutional treatment will be demanded in each case. The vapor bath, an occasional course of medicine, together with the use of spice bitters, composition, Dr. Logan's alterative syrup, sarsaparilla syrup, and compound lobelia pills are the means and remedies chiefly to be employed.

When an ulcer is formed on the roof of the month, it should be wet frequently with the tincture of myrrh. Where the bone has exfoliated and formed an opening into the cavity of the nose the opening may be filled with cotton or a plate worn over it, by which fluids will be prevented from passing into the nose, and the voice will be natural. The chief reliance for the cure is in constitutional treatment.

In ulcer of the throat the tincture of myrrh, No. 6, a strong decoction of sumac leaves and berries, and tincture of lobelia, may be employed as gargles. Breathing the steam from hot water, a portion of lobelia being thrown in the water occasionally, will prove beneficial when the disease attacks the mouth, throat or nose.

Where the nose is diseased the patient should frequently resort to the breathing of steam through the nostrils, and the parts should be syringed occasionally with bayberry or sumac tea, adding a portion of No. 6 or the simple tincture of myrrh.

Syphilitic eruptions are in general very readily cured by the use of the vapor bath, a course or two of medicine, bathing the eruptions with a preparation made by adding sumac berries to No. 6, or with the third preparation of lobelia, and then apply the stimulating ointment or some kind of salve to protect the parts from the air; this last is more particularly needed in case of ulceration.

Where the periosteum of the bone becomes diseased, and there is evidence of the existence of fluid between the periosteum and

the bone, attended with throbbing pain and a blush upon the skin, it should be opened, and the part poulticed until the swelling and inflammation subside, when a strengthening plaster must be applied, and if the parts be slow in healing, syringe the cavity with tincture of myrrh.

In many cases the swelling will fluctuate, proving the existence of a fluid, but unaccompanied with pain, and without inflammation or a blush of red upon the skin; here it will be improper to make an opening into the swelling, but steam the limb daily, apply stimulating embrocations, keep the parts warm and bandaged, and employ constitutional remedies.

### OBSTRUCTED MENSTRUATION.

#### SECTION CVIII.

Department in the function of menstruation may be occasioned by a variety of causes, the most prominent of which is exposure to cold and wet during the menstrual period, or immediately preceding the time of its occurrence.

This function may be either partially or completely suspended. Some females during this period experience pain almost as severe as labor pains, and which continue in some instances several days, in others only a few hours.

When menstruation does not come on at the period of life at which it usually does, it is termed suppressed menstruation. The symptoms usually attending the complaint, and the treatment indicated, will be found under the head of chlorosis or green sickness.

An excessive flow of the menses depends upon constitutional debility or a disordered condition of the system, and the same course of treatment that regulates the secretion when too profuse, may be found equally applicable when this function is partially or wholly obstructed.

Various derangements of the system are observed to follow as a consequence of obstructed menstruation, such as violent pain in

the head, bleeding from the nose, violent fever, delirium, bleeding from the lungs, and violent pain in the side, back or loins.

TREATMENT.—Whether the obstruction be partial or complete, the case will require to be treated upon the same general principles. The indications of treatment are to restore the natural warmth of the body, to excite and sustain the capillary circulation, to correct the disordered condition of the stomach and bowels, and to strengthen the nervous energy which governs this and every other function of the body. The remedies and means to be employed to fulfil these important indications, are pure stimulants, the vapor bath, emetics, anti-canker medicine, and injections to the bowels. These remedies to be applied according to the circumstance of the case; when the symptoms are violent the remedies must be applied more liberally than in slight derangements.

There are no other means so effectual in restoring the function of menstruation as regular courses of medicine, and the free use of injections to the bowels, containing stimulants and lobelia Half a pint of strong pennyroyal tea, adding a teaspoonful of No. 6 and as much green lobelia; and bayberry or sumac tea, adding a teaspoonful of the third preparation of lobelia; or composition tea, adding a teaspoonful of green lobelia, may be employed.

In some instances it is only necessary to soak the feet two or three times a day, to use a few injections, drink freely of warm pennyroyal tea, and keep covered warmly in bed, with a warm brick placed at the feet.

In other instances the case will demand the frequent repetition of a course of medicine, together with the frequently repeated use of the other means already mentioned, more particularly the injections. The functions of the kidneys, bladder and uterus, may be more immediately and effectually influenced by means of injections than by medicine taken into the stomach.

When the derangement has become seated, and depends upon constitutional debility, the patient should seek the fresh air, use moderate exercise, sponge the body with cold salt water in the morning, repeating it twice or three times a week, apply friction to the surface with a flesh brush or salted towel, and take such

medicine as the circumstances of the case may demand, observing especial care to keep the feet dry.

The use of tonics are indicated when the derangement has been of long standing, and the patient weak and relaxed. The ladies' spice bitters, which contain a portion of gum myrrh and unicorn root, may be employed as a general tonic and stimulant in such cases.

In nine cases out of every ten of the cases of obstructed menstruction, the derangement is occasioned by exposure of the feet to cold and dampness. Standing upon a damp pavement or upon wet ground, in thin soled shoes, is very apt to occasion obstructions in the system, not always to be removed without considerable difficulty.

# TREATMENT OF FLUOR ALBUS, OR WHITES.

### SECTION CIX.

When this complaint is attended by general debility, which is its most common cause, a permanent cure cannot be anticipated without an improvement in the general health. To effect this a course or two of medicine will be required in most instances, to cleanse the stomach and bowels; after which the ladies spice bitters, or some other form of bitters, should be taken before meals: and a teacup two-thirds full of bayberry or sumac tea, adding a teaspoonful of composition powder or half a teaspoonful of cayenne pepper every night or morning, to keep the stomach from becoming foul. This dose will sometimes vomit, but never unless the stomach be disordered, and then it will always be beneficial. Half a pint of a strong decoction of equal portions of sumac or witch hazel leaves, and poplar bark administered by injection to the bowels every night at bed-time and retained until morning, will not only improve the condition of the bowels, but it will also strengthen the uterine organs. Injections with a female syringe must also be employed. In the early stage of the complaint, or when the parts are irritable, a simple decoction of bayberry or

sumac may be employed; but where the sensibility of the parts is blunted, stimulants, as No. 6, or cayenne, must be added to the anti-canker tea, in quantity sufficient to be felt very sensibly; the injection to be repeated several times a day.

Sponging the body with salt water in the morning, friction to the surface, wholesome and nourishing diet, are important means

to improve the general strength.

## MISCELLANEOUS.

### SECTION CX.

### NERVOUSNESS-WEAK NERVES.

This question is often put to physicians: What shall I do to strengthen my nerves? It is not at all times that the proper remedy can be pointed out, without some inquiry into the patient's habits, occupation, &c. Thus one of a nervous temperament may, by the free use of tobacco, either by chewing, smoking or snuffing, become extremely nervous from its effects. Whilst one will use tobacco freely without apparently weakening his nervous system, another will have his nerves very much weakened by using it even in moderation.

The use of any of the narcotic poisons debilitates the nervous system. Hence opium eaters are apt to have their nervons system shattered, and consequently they suffer extreme depression of mind, except when the brain is under the immediate influence of the narcotic, which produces a kind of hallucination of mind, bordering sometimes upon mania. The intemperate use of strong drink also weakens the nerves, occasioning tremulous motions of the hands and sometimes of the whole muscular system. Depressing passions, venereal excesses, too close application to study, more especially in confined and unwholesome air; dyspepsia, and, in fine, whatever weakens the system generally, will weaken the nerves; and in persons of nervous temperament, a disordered state of the nerves frequently forms a most prominent symptom,

SIG. FFF.

and then the patient is said to be nervous. Attending in a family not long since, a female in middle life inquired of me if we had not a medicine that would strengthen the nerves. I perceived that her nerves were extremely weak, and having ascertained that she was a great smoker, I told her what I believed to be the chief cause of the nervous weakness, which it appeared had never occurred to her as having such a tendency. Protracted illness, more especially when poisonous drugs are used as medicine, is apt to leave the nervous system in a weak condition, sometimes continuing for many years. The same means that will restore the general health and strengthen digestion, will strengthen the nervous system. If the nerves are weak in consequence of a disordered condition of the stomach, the original cause must be removed before the nerves can be strengthened.

The use of the cold shower bath, or sponging the body, every morning, with cold salt water: frictions to the surface with the flesh brush, salted towel, or horse hair mitts, together with exercise in the open air, are important means for invigorating the nervous system.

The use of the various narcotics employed in the regular practice, as belladona, stramonium, tox-glove, &c., are injurious and very weakening to the nervous system.

Nervines.—Cypripedium humlie, (Thomson's nerve powder) scutilaria latrifolia (scull cap) are chiefly employed as nervines in the Thomsonian practice. These may be used on many occasions with much benefit, as a means of promoting sleep and of quieting nervous agitation. A collection of acid in the stomach frequently occasions wakefulness, and an excited condition of the nervous system, in which case a dose of saleratus, or bi-carbonate of soda, in luke-warm water, is a good remedy.

Lobelia, though not a narcotic, exerts a marked influence in calming nervous excitement. There is no remedy of equal value in quieting fretfulness and wakefulness in infants and children, as the tincture of lobelia, given in small doses. Although it may not produce sleep with as much certainty as laudanum, or some other preparation of opium, yet the fact of lobelia being free from any deleterious quality, gives it the preference to narcotics.

#### POLYPUS OF THE NOSE.

Polypus of the nose is seldom observed in others than those of scrofulous constitution. It is generally brought on in consequence of repeated catarrh or cold.

During the first stage of catarrh, the mucous membrane of the nose becomes dry, then a free secretion of thin fluid is produced, terminating finally in a thick pus-like secretion. This is the natural course of catarrh as it passes to a favorable termination. Whereas, in scrofulous constitutions, the mucous membrane, when diseased by repeated colds, may be too far debilitated to establish that kind of inflammatory action necessary to the formation of those salutary secretions above mentioned, and instead of their being a thick yellowish secretion, which terminates the disease, leaving the parts in a natural condition, a tough, semi-transparent substance is formed on some portion of the lining membrane of the nostril, which adheres to the parts and increases in size, until in some instances it fills one side of the nostril, and frequently becomes extended down the posterior naries, so as to be seen and felt in the throat, behind the palate. Polypus is composed of albumen, and, in time, becomes, in some degree, organized, blood vessels being shot through it from the mucous membranc.

A substance similar to polypus of the nose is sometimes formed on the uvula of the palate, resembling the soft part of an oyster, arising from the same cause, though not so generally confined to those of scrofulous constitutions as the former disorder.

TREATMENT.—Polypus of the nose, in its early stage, may, in many instances, be dispersed by black pepper, composition powder, or finely pulverized blood root, snuffled freely up the nostril. If the polypus be so large as to obstruct the passage of air through the nostril, the powder should be blown upon the polypus through a quill.

Constitutional Treatment.—When the general health is much deranged, constitutional treatment must be instituted to restore a

more healthy action in the mucous membrane.

When the uvula becomes affected in the manner above described, having the appearance of the soft part of an oyster, or of

a blister, gargling the throat frequently with a mixture of black pepper and whisky, pepper sauce, or strong bayberry or sumac tea and pepper, will, in general, effect a cure in the course of a few days.

Polypus of the nose cannot, in every instance, be removed by the means above mentioned, as in many cases nothing short of a surgical operation will effect its removal.

#### CRAMP IN THE LEGS AND FEET.

Cramp in the feet and calves of the legs, may, in numerous instances, be prevented by the patient rubbing the feet and legs, up to the knees, with the stimulating liniment and wearing woolen or worsted stockings at night. A bottle of hot water, or a hot brick placed at the feet on going to bed, will also prove a preventive to cramp.

Most persons who are attacked with cramp at night are forced to jump out of bed before the muscular spasm can be overcome.

## PROLAPSUS ANI—PROTRUSION OF THE BOWEL.

In this complaint a portion of the intestine protrudes from the anus.

Causes.—Constitutional weakness of the parts; the use of purgative medicine, especially aloes, pills; and violent straining at stool, are the principal causes of the complaint.

TREATMENT.—The first point to be attended to when prolapsus takes place, is to return the protruded intestine. This is generally easily accomplished early after the protrusion of the bowel takes place, by simply pressing upon the parts. In some cases it is best to introduce the finger, previously oiled, into the intestine, and pressing gentle upon the parts until the bowel is returned into its proper place.

If the parts become much swollen and inflamed, fomentations should be employed by causing the patient to sit over a vessel containing boiling water, or vinegar and water; or a warm poultice applied, composed of lobelia powder and elm, and the patient nauseated with small portions of lobelia. If vomiting should occur from the small doses of lobelia, pressure must be made upon the protruded bowel at the time.

The means to be employed for strengthening the bowel are injections of a strong decoction of sumac or witch hazel leaves, and retained in the bowels several hours, and this repeated daily. An injection of the kind above mentioned, administered at bed-time, may in general be retained until morning.

In many cases the intestine does not protrude except when the bowels are moved. If the prolapsus be liable to occur at other times, a tight bandage or a truss made expressly for this complaint must be worn until the parts become strengthened.

If the general health be deranged, constitutional treatment will be required. Washing the body in cold salt water in the morning the second salt water in the morning that the second salt water is the second salt water.

ing will prove beneficial in invigorating the system.

"In infants a fresh protrusion of the rectum may sometimes be prevented by making them set on a high close stool, with their feet hanging freely down. Every thing tending to produce either diarrhea or costiveness should be avoided."—Castles' Manual of Surgery.

# HERNIA, OR RUPTURE.

Hernia, in the the great majority of instances, commences about the groin, forming at first a small tumor, but if neglected, the protruded intestine is apt to descend gradually along the course of the spermatic chord and sometimes forms a large tumor in the scrotum.

Causes.—The usual exciting causes of hernia are violent sneez-

ing, heavy lifting, and hard straining.

In most instances the protruded intestine forming the tumor, is readily turned into the cavity of the abdomen by slight pressure upon it. This is called *reducible* hernia.

In some cases adhesions take place, preventing the return of the

tumor into the abdomen, forming irreducible hernia.

Occasionally the protruded intestine becomes strangulated in consequence of a stricture at the upper part, or neck of the tumor, constituting a most formidable and dangerous form of disease. From estimates that have been made, it would appear that one of every ten or twelve of the individuals in the community are affected with hernia, or rupture, and still *strangulated* hernia is of

rare occurrence. The strangulation may be either partial or complete; and a patient may experience severe pain in the parts without there being any stricture; it is asserted by experienced surgeons that strangulation is most liable to occur where the hernia is very small.

TREATMENT.—In the treatment of reducible hernia, the first point is to return the protruded intestine into the cavity of the abdomen, and then apply an appropriate truss. By attending to the rupture when first discovered, and applying a truss, a permanent cure will in many instances be effected. The truss must be worn constantly except when the person is in bed, and always be put on again before rising from it. During an effort to laugh or sneeze, the hand should be pressed against the parts, unless supported by a truss.

Of the various kinds of trusses introduced into use, there are probably none superior to Dr. Chase's, of Philadelphia.

In simple irreducible hernia the tumor should be supported by a bag, to prevent its further enlargement.

# STRANGULATED HERNIA.

When hernia becomes strangulated, violent pain is experienced in the part and throughout the belly, attended with sickness and vomiting, and more or less fever. If the stricture continue without being relieved, the most distressing symptoms ensue. The patient continues to retch and vomit, and the contents of the bowels down to the stricture are sometimes thrown up; the extremities are cold; the pulse small, quick and hard. "After a time hiccough comes on, the pulse is hardly perceptible, respiration weak, and the whole body covered with a cold clammy sweat. Mortification now takes place, beginning in the protruded viscera and extending to the neighboring parts. The patient suddenly becomes easy, the swelling of the belly subsides, and the tumor of the part diminishes, and the skin covering it sometimes changes its natural color for a livid hue." By pressing the tumor with the fingers, a crackling or crepitus will be perceived, as though bubbles of air were bursting under the pressure of the fingers. "This crepitus is the sure indication of gangrenous mischief with-

in. In this state it goes up spontaneously, or is returned with the smallest degree of pressure; a discharge is made by stool, and the patient fancies himself better. This feeling, however, is of short duration, hiccough and the cold sweats increase, convulsive symptoms come on, and the patient soon expires."

TREATMENT OF STRANGULATED HERNIA.—The use of the vapor or warm water bath, and relaxing the system fully by giving the patient freely of lobelia, and administering it also by injection and retained, constitutes the treatment most likely to overcome the stricture.

After the patient has been in a vapor or warm water bath, he should be wrapped in a blanket, and kept warm in bed provided perspiration continue. If the skin become dry and the patient be oppressed with heat, the surface may be bathed with spirits or

vinegar.

The most important means for the cure of strangulated hernia is the use of lobelia injections. They may be prepared by adding lobelia powder to simple warm water. The brown emetic is to be preferred, a teaspoonful or even a tablespoonful of which may be administered at a time and retained. When the system becomes relaxed, an attempt should be made to return the protruded gut into the cavity of the abdomen, not by simple pressure upon the tumor, but by placing a hand at each side of the tumor, and as gentle pressure is made by the palms of the hands the tumor should be drawn backwards, by which the contents of the intestine will be more likely to return into the cavity of the abdomen. Another method is to grasp the tumor with one hand, making moderate pressure, and with the finger of the other hand endeavor to push small portions of the intestine through the stricture. This should not be attempted, however, until the system has become more or less relaxed by the use of lobelia given freely, and administered by injections; together with the application of the steam or warm water bath.

A patient who has a strangulated hernia should keep the body bent forward, and the knees drawn towards the belly. The position generally to be preferred is on the back with the hips and shoulders raised and the thighs drawn up. When the above treatment fails of removing the stricture, after being perseveringly employed, the last resort is an operation. This, however, will require a surgeon. Although few recover after an operation, still it may save life in some cases. The operation itself is not severe, nor dangerous, but it is rarely performed until mortification is about to take place.

# COURSE OF MEDICINE.

The following process constitutes a Thomsonian course of medicine:

1st. A steam or vapor bath, the patient taking, during the operation, a dose of composition or pepper tea.

2d. An emetic, prepared and administered according to the directions hereafter given.

3d. An injection to operate upon the bowels. In most cases, it is better to administer an injection at the commencement, before the vapor bath, and repeat it after the emetic operates.

4th. After the operation of the emetic, the vapor bath is again applied, to restore a natural warmth to the system, or, as Dr. Thomson expresses it, "to set the wheels of life in proper action." When the patient has remained a sufficient length of time in the bath, he must be showered with cold water, or sponged with whisky or vinegar, rubbed dry, and, in most instances, it is best to bathe the skin with salt and vinegar, or No. 6.

5th. Light nourishment is to be given after the emetic operates, either before or after the last bath, as the inclination of the patient may dictate. Milk porridge is generally given as nourishishment after a course of medicine, and when the patient inclines to take it during the operation, it may be given, as it will assist the operation of the emetic. In sudden attacks of disease, however, as in fevers, pleurisy, &c., crust, coffee, elm gruel, barley water, or gum arabic water will be more suitable.

The above process, termed a course of medicine, first instituted by Samuel Thomson, is the most effectual, consistent and philosophical plan of treatment ever devised for the cure of disease. By courses of medicine, together with the usual intermediate treatment, disease may be cured that has resisted every other plan of treatment; and even though it fail of effecting a cure, still the treatment will not injure the constitution—the declarations of medical men to the contrary notwithstanding. The medical profession manifest a degree of prejudice against the Thomsonian practice that is wholly inexcusable. As guardians of the health and lives of the community, they should know better than to make the outlandish, talse and absurd assertions which many of them do in relation to the Thomsonian practice.

# GENERAL DIRECTIONS FOR ADMINISTERING A COURSE OF MEDICINE.

1st. The Vapor Bath.—Various methods are employed in the application of the vapor or steam bath; the usual plan, however, is to place the patient upon a tight-bottomed chair, throwing a quilt over him, leaving the head uncovered; a flat-bottomed basin or dripping-pan is to be placed under the chair, a quart of hot water poured in, and put into it a red hot brick or stone. If the brick be entirely red hot it should be set in sidewise at first, or the steam may be too warm for the patient to bear; in a few minutes the brick may be placed with the flat side down. Three bricks will be sufficient, provided they are thoroughly dry and red hot on one side. If the steam be too hot the quilt may be raised from the floor so as to admit the cold air, and when the patient feels oppressed with the heat, the face and head must be frequently wet with vinegar and water or whisky, and occasionally the body of the patient should be washed or sponged with cold or tepid water; during the latter part, or at the close of the steaming, a shower bath must be used, or the patient washed in cold water or spirits.

The feet may be more effectually steamed by placing a stool upon the chair, the patient sitting upon the stool and resting the

heels upon the edge of the seat of the chair.

A small tin boiler and pipe for conveying steam either into a steam-closet or under a chair, is more convenient than hot bricks, and the steam can be more easily regulated than when bricks are used.

Steaming in Bed.—When a patient is too weak to sit up, the steam may be applied to the patient in bed, by means of hot bricks wrapt in damp cloths, or by placing a frame work, made of three barrel hoops, with the ends cut off and tied to two strips of plastering lath, or something of about the same length. This frame is placed over the patient and a cover spread on, leaving the head uncovered. The steam to be conveyed through a pipe from a boiler; or it may be generated by putting basins under the cover containing a little hot water, and placing hot bricks therein. Patients, who are too weak to sit up, will often bear the steam applied in this way an hour, or even more, by using the precaution to wet the face frequently, and the body occasionally with whisky and water or vinegar.

The steam box or closet possesses many advantages over the usual mode of steaming on a chair, the greatest of which is the facility of applying the shower bath. This, however, may be done very readily without the steam box. Open the cover at the neck and pour a pitcher of cold water upon the head of the patient, having an old quilt or carpet placed under the chair to catch the water.

The patient may continue in the bath from fifteen minutes to three quarters of an hour, or even longer, as the circumstances of the case may require. Sometimes patients feel faint while in the bath, which may arise simply from sitting upright, or it may depend upon a disordered condition of the stomach. A dash of water in the face, fresh air, and wetting the head with vinegar, will overcome faintness and oppression. Some patients will swoon away on sitting up a few minutes, whether they be in a steam bath or not. There is no danger to be apprehended from fainting, except in very sunken states of the system, as in low cases of typhus fever, &c. All that is required when fainting occurs, is to a y the head as low or even lower than the body, sprinkle some cold water in the face, and apply hartshorn or some smelling salts

to the nose. Of the thousands of vapor baths that have been administered under my observation, I have never seen but three patients faint during the operation.

THE EMETIC.—There are many modes of preparing an emetic.

For ordinary cases the following will be found effectual:

A teaspoonful of the third preparation of lobelia;

A teaspoonful of green or brown lobelia;

A large teaspoonful of sugar;

Rub these well together in a teacup, and then pour on a teacup two-thirds full of strong bayberry or No. 3 tea, nearly scalding hot; stir it occasionally and take it luke-warm.

A similar dose is to be repeated in the course of twenty minutes or half an hour. It is seldom necessary to take more than two doses, still more may be given if required. I have on many occasions given two and three ounces of lobelia in administering a course of medicine.

In all cases of seated disease, where the stomach is weak and the system relaxed, the emetic should be combined with the more active stimulants, such as the formula above mentioned, adding freely of No. 6 or pepper to the emetic. In low cases of protracted fevers there is no better form of emetic than the liquid of the third preparation of lobelia in strong bayberry or No. 3 tea.

Another Method of Preparing the Emetic.—Take a large heaping tablespoonful of bayberry or No. 3 powder and an even teaspoonful of cayenne, pour on half a pint of boiling water, and then add a teaspoonful of nerve powder; when it settles pour or strain off the tea, and whilst moderately hot add four teaspoonsful of green or brown lobelia powder, and sweeten. This may be taken at once or at two or three times at intervals of fifteen or twenty minutes. The stronger the bayberry tea the more easily and effectually will the emetic operate.

Another Plan of Preparing the Emetic.—Take a teaspoonful of lobelia powder, half a teaspoonful of nerve powder, and two large teaspoonsful of No. 6. Pour on a teacup two-thirds full of strong bayberry or composition tea, sweeten and take warm. The dose to be repeated three or four times, at intervals of fifteen or twenty minutes.

And again, the lobelia powder may be mixed in strong composition tea, sweetened, and taken in the usual doses. This last is the way in which emetics are usually prepared for children.

After the emetic is given the patient need not take much drink until the emetic operates. It is a practice with too many nurses to force the patient to drink a cup of medicine every few minutes during the operation of a course of medicine. It is much better to allow the emetic to remain on the stomach as long as it will, or at least an hour or two. Where it is desired to make the emetic operate, it may generally be effected by giving the patient a dose of pepper tea, or a teaspoonful of the super-carbonate of soda, or half a teaspoonful of salæratus dissolved in a tumbler half full of luke-warm water. In cases of great debility the patient should take occasionally, during the course of medicine, a dose of pepper tea or of composition and No. 6; and after vomiting, milk porridge, chicken tea, or some other kind of nourishment, seasoned with pepper.

3d. The Injection.—In most cases it is better that an injection be administered in the commencement of the course, before the vapor bath is administered, and another after the operation of the emetic.

The injection may be prepared in the same way as an emetic. A very common form for injections is half a pint of composition tea, adding a teaspoonful of nerve powder to the tea whilst hot, and when luke warm a teaspoonful of lobelia powder and as much No. 6. This answers for common cases. Where there is canker in the bowels, and in case of dysentery, cholera morbus, &c., the bayberry or No. 3 tea should be used, adding the liquid of the third preparation of lobelia, or two or three teaspoonsful of No. 6, and a teaspoonful of green lobelia.

If the bowels be much disordered, injections will in general occasion more or less pain and distress for a short time, the patient, nevertheless, experiences much relief from the operation. An injection containing lobelia, if retained in the bowels, will often cause sickness at the stomach and vomiting, and effectually relax the system. Recent attacks of disease have in many instances been broken up by such an operation. As a general rule,

I have observed that patients experience the most benefit from injections that occasion the most distress and pain. Lobelia possesses a property of arousing the sensibility of the stomach and bowels, so that if they are diseased it causes the patient to feel the disease.

4th. The Second Vapor Bath.—The proper time for administering the last steam bath in a course of medicine as a general rule is, when the patient ceases to sweat, or becomes restless after the operation of the emetic. If the patient continues to retch and vomit a long time, there is nothing so effectual in settling the stomach as a steaming. When the steaming has been continued long enough, the patient must be showered with cold water or washed with vinegar or spirits, rubbed dry, and kept warm. It is beneficial in many cases to bathe the surface with No. 6, pepper sauce, or stimulating liniment, after the last bath, and when the patient is rubbed dry. This is more especially needed where the skin is in a relaxed condition, as in chronic rheumatism, bronchitis, asthma, consumption, &c. Sometimes the skin is extremely sensitive to stimulants, and if applied too freely will occasion a severe burning sensation in the skin, which may continue several hours.

Food.—Some persons, on reading Dr. Thomson's work, understand him to say that patients, after a course of medicine, may take almost every kind of food. It is those cases where the appetite and digestion are restored that Dr. Thomson alludes to when he speaks of giving almost any kind of food that the appetite may crave. In most cases of disease the digestive powers are too feeble to digest any but the lightest kinds of food, such as barley water, crust coffee, arrow root gruel, gum arabic water. Even milk porridge, which is generally given after a course of medicine, is not adapted to cases of fevers, severe pleurisy, imflammation of the lungs, and in the early stages of almost every sudden attack of disease. It is far better that a patient, in the early stage of a severe attack of disease, abstain from food altogether than to take such as will oppress the stomach.

From three to six hours is in general required for a full course of medicine; and except in urgent cases, it is better to allow the

emetic to remain in the stomach an hour or two, or at least to avoid forcing the patient to drink largely of teas soon after the emetic is taken.

A Short or Partial Course of Medicine.—In very many instances a full course of medicine is not required; all that is necessary is to restore the natural warmth of the body, and then to give an emetic, dispensing with the second bath.

EMETIC WIEHOUT STEAMING.—In sudden and violent attacks of disease, as in croup, fits, colic, sick headache, cholera morbus, and in fine all sudden attacks of disease, an emetic may be given without the previous administration of a vapor bath, or any other preparation.

Hot bricks wrapped in damp cloths, placed around a patient, may take, in many cases, the place of the vapor bath. Thus in cases of low fevers, as they are termed, it often becomes necessary to vomit a patient every day when he is too weak to sit up. In rheumatism, when the patient cannot be moved without occasioning severe pain, it may be better, especially in cold weather, to give emetics without moving the patient from the bed. If the weather be warm, however, it will, in the majority of instances, be better to have the patient regularly steamed and showered.

Steaming when the Patient is too weak to sit up.—When a patient is unable to sit up, the vapor bath may be applied on a couch or mattress, by means of a frame made of three barrel hoops and two or three plastering laths, or something of about the same length and size. Eight or ten inches of each end of the hoops must be cut off, and the laths tied to the hoops so as to form a frame, which must be placed over the patient, and a quilt thrown over, leaving the patient's head uncovered. The steam to be conveyed under the cover through a pipe, or by placing a red hot brick in a basin containing a small quantity of water under the frame. In the place of the frame above mentioned, the patient may have the bath administered on a settee or sofa. Patients who are too weak to sit up will bear steaming in this way an hour or more at a time. The face and breast should be bathed occasionally with

vinegar and water, or spirits and water, the patient taking a small dose of stimulating tea several times during the operation.

Preparing the Patient for a Course of Medicine.—In sudden attacks, and in all cases of acute disease, a course of medicine may be given as before stated without any preparatory medicine; whereas, in chronic complaints, as in consumption, deep seated dyspepsia, and in cases where the system is in a cold and torpid condition, a course of medicine will prove more effectual by the patient taking composition several times a day and three or four compound lobelia pills at night, and continuing the use of these medicines several days before the course is administered.

Repeating the Course of Medicine.—In the first stages of disease, and more especially if the attack be violent, the course of medicine, or at least a partial course, may be repeated daily until the symptoms abate. In small pox, measles, and scarlet fever, the disease will run its course, and all that we can anticipate from the operation of medicine in these cases, is to relieve the symptoms, and aid the constitution to work off the disease in the way which nature, or the God of nature has established. In chronic complaints, as in long standing dyspepsia, consumption, chronic gout, and rheumatism, and whenever there is absence of fever, a course of medicine will seldom become necessary oftener than once in two or three weeks. In fine, there are many cases of seated disease in which more reliance is to be placed upon fresh air, a change of residence, traveling, sea bathing, and a strict attention to diet and regimen, than upon medicine.

Remarks concerning the various symptoms attending the operation of a Course of Medicine.

I have heard persons say that they never felt better than when going through a course of medicine, excepting the few minutes when the sickness and vomiting came on; and then again under a different condition of the system, patients will experience great pain and distress from the effects of the medicine. The tendency of the course of medicine is to arouse the sensibility, and to assist the efforts of nature to overcome obstructions, cast off morbid matter from the stomach, and to restore a natural action through-

out the system; and hence the more the system is diseased, the more distressed the patient will be when he is made to feel his real condition.

At one time a patient may vomit by merely taking a dose of composition tea, whilst at another, when the stomach is in a different condition, half a dozen doses of composition will not occasion the slightest sickness. Thus, a patient with a very foul stomach, will become very sick from taking a dose of composition, or of bayberry and pepper, during the first steaming in a course of medicine, and after the operation of an emetic and the stomach becomes settled, a pint of composition may be taken without causing vomiting. It often happens, however, that the stomach will not be settled until after the last bath, the patient vomiting freely on having his system warmed by the steam, and by taking stimulants; after which the stomach will not be disturbed by these medicines, even though they be taken freely.

A vapor bath, when administered previously to an emetic, or when the emetic has not operated effectually, may occasion sickness at the stomach, and cause the patient to feel weak and fainty for a time, but will increase the strength when the stomach is not foul. I have on many occasions observered a patient on taking a course of medicine to be much stronger after the last steam, who had felt weak and relaxed from the first in consequence of the disordered state of the stomach. Patients sometimes become sick during the first part of the steaming, and feel as though they cannot sit up, or bear it any longer, but by throwing cold water in the face and allowing fresh air to come to the patient, the sickness will pass off in a short time, and when perspiration becomes free, the patient will experience no difficulty in sitting in the bath the usual time required for the operation.

When the stomach is cold and contains acid, a dose of pepper or composition tea is apt to cause pain in the stomach, more especially during the first steaming in a course of medicine. In such cases the pain is relieved when the patient belches wind or gas from the stomach. No. 6 in hot water, taken as hot as the patient can bear it, will cause the gas to be sent up and the patient is thus

relieved. Essence of peppermint, lavender, or any thing that is good to expel wind from the stomach may be employed.

The operation of an emetic, which in certain conditions of the system is attended with scarcely any unpleasant feelings, under other circumstances, for instance, where there is great derangement in the stomach and bowels, will be accompanied by distressing sickness and pain. The relaxation and sickness sometimes produced under the influence of lobelia, is said to be very much like extreme sea sickness. Probably no case of death has ever been occasioned by sea sickness alone, although it sometimes lasts many days or even weeks, the patient continuing to retch and vomit almost incessantly.

The alarming symptoms, as they are termed, seldom or never occur to any considerable degree under the operation of a course of medicine, except where disease is deeply seated, or in patients of a peculiar nervous temperament. Much, however, depends upon the form of the emetic. Thus, the lobelia seed given without much stimulus, will occasion more or less relaxation of the system in almost every instance; still the same form and quantity of the medicine will produce great diversity of symptoms in different conditions of the stomach; and in persons of different temperament. I have observed half a teaspoonful of the brown emetic (lobelia seed) to bring on what are called alarming symptoms, in patients, who, during a preceding course of medicine, had taken five teaspoonsful without producing such symptoms. The following cases will serve as an illustration of what I have asserted: An elderly man by the name of Smedley, who had seated consumption, had several thorough courses of medicine administered to him without occasioning other symptoms than those which usually attend the operation, until the ninth course, when the first dose of emetic, which was a small one, brought on the alarming symptoms, so called, that continued more than fourteen hours, when he vomited freely, and soon after fell asleep, and when he awoke, he had scarcely any recollection of the strange condition which he had been in during the continuance of the alarming symptoms. This operation appeared to benefit him more than all the previous treatment.

In many instances, patients will experience pain in the stomach or bowels, soon after taking the emetic, but which generally continues but a short time, yet sometimes for several hours. In other cases, and more especially when disease is deeply rooted in the system, the patient, whilst under the influence of a course of medicine, will exhibit symptoms well calculated to alarm those who have not witnessed them before, or who do not know that there is no danger to be apprehended. Some will complain of distress in the bowels, throw themselves about the bed, utter broken sentences, speaking in a hurried and unconnected manner, sob and breathe very irregularly, get out of bed, make frequent efforts at stool, and be constantly changing position. Sometimes the system will become completely relaxed, and still the pulse have nearly its natural strength; the countenance will be pale, the skin cool, the breathing irregular, and the patient thirsty. During the continuance of these symptoms, there is great commotion in the stomach and bowels, as though the vital forces were concentrated there to root out disease. I am fully convinced, from a great deal of observation, that, during alarming symptoms, the nervous influence is chiefly concentrated in the great sympathetic system of nerves which govern the functions of the internal organs, by which a new action is established and disease removed. When a patient is very much relaxed under the influence of the emetic, his face, breast and hands should be bathed with vinegar or whisky, and take occasionally some stimulants, either pepper or composition tea, No. 6, in warm water, or milk porridge, well scasoned with pepper. If the patient crave cold water, it may be allowed to be taken in small quantities; still, pennyroyal or other simple herb tea is more suitable.

In a great number of instances, where patients under my treatment have had the *alarming symptoms* during the operation of a course of medicine, very little perceivable effect was produced by anything that was done. The medicine previously given having taken effect, it seemed to require a certain time for its full operation upon the system, varying in duration, however, according to the circumstances of the case. In some instances, the alarming symptoms will pass off in the course of an hour from

the time of their commencement, whilst in others they may continue six or eight hours, or even much longer. I once had a patient who continued with the alarming symptoms thirty-six hours, after which she slept several hours, and the next day was better than she had been for several preceding months, and declared that she would not object to going through a similar operation. On the following week, another course was administered to this patient; distressing symptoms came on, such as occurred during the preceding operation, and continued over twenty-four hours. With a view to shorten the duration of the course, I, at the suggestion of Dr. John Smith, commenced giving the patient the third preparation of lobelia, in tablespoonful doses, repeating the dose every twenty minutes, until twelve tablespoonsful were given, and although this evidently assisted the operation of the medicine, still the alarming symptoms continued about thirty hours. This case was one which scarcely promised even a hope of recovery, yet, after undergoing three such operations, her health greatly improved, to the astonishment of all who knew her case.

The following symptoms will often be observed during the operation of a thorough and efficient course of medicine, in cases where the disease is deeply seated, and especially when it is about giving way, to-wit: Soon after the emetic is taken, the patient complains of pain or distress in the stomach, which soon extends to the bowels; he is continually changing his position; rubs his stomach and bowels and complains very much of distressing feelings. The breathing becomes irregular, respiration being sudden, somewhat like the sobbing of a child. The distressing feelings in the bowels subside, but the patient remains relaxed, the skin colder than natural and contracted; the mucous membrane of the nose is dry, inducing the patient to pick or rub his nose frequently; the tongue and mouth are dry, attended with more or less thirst. The patient makes efforts to get out of bed; frequently feels like having a motion from his bowels; talks in an unconnected manner, and sometimes lies completely relaxed, apparently too weak to raise his hands, and the countenance is vale and contracted. After the lapse of a few, but usually in the course of four, hours, and frequently much longer, the patient vomits freely, after which he goes to sleep; his skin becomes moist; he sleeps sweetly, and, when he awakes, feels much better than he did previously to the operation.

Thomsonians are frequently applied to in desperate cases, where it is impossible to determine whether the disease is curable or not, and notwithstanding the grave charges so frequently made against the Thomsonian practice, when it fails of removing disease, still a trial should be made, so long as the circumstances of the case furnish grounds for a reasonable hope of success. Courses of medicine are sometimes administered with the view only of affording relief to the patient, the disease being evidently incurable; and yet it would seem that a portion of the community, and some, who ought to know better, attribute every death that occurs where Thomsonian treatment is employed, to want of skill in those who have charge of the case. Among the great mass of desperate cases that come under Thomsonian treatment deaths will, in the very nature of things, occasionally happen, unexpectedly and under unfavorable circumstances. In the early period of my practice, I was called to attend the wife of Samuel Wheeler, of Wilmington, Del., and found Mrs. W., as I then thought, in a condition to be benefitted by a course of medicine, and had determined on having one administered. A dose of composition was prepared, but before it was sufficiently cool to be taken, she expired. Had I arrived two hours earlier than I did, doubtless Mrs. W. would have died whilst under the operation of a course of medicine, and although the medicine might have prolonged the life of the patient a short period, still she could not have survived many hours longer than she did, as mortification had already taken place. Courses of medicine doubtless have been, and will again be, administered to patients on the very verge of dissolution, creating not only an unfavorable impression in the neighborhood where it happens, but a highly colored and distorted account of the case is carried to various parts of the country. The general good success, however, attending the Thomsonian practice, affords sufficient evidence to establish the belief that it is based upon correct principles, and that this system furnishes the means which the constitution requires to overcome disease; for although it does, and must necessarily fail sometimes of effecting cures, yet, what evidence have we that it will not prove successful when properly applied, in all cases that are curable by means of medicine.

Most patients experience an unusual degree of weakness and general distressed feeling about the time a disease is giving way; the patient feeling discouraged, under the impression that the course of medicine, or other treatment, is too hard for his constitution. In every case of deeply seated disease that I have treated and a cure has been effected, the patient was discouraged about the time that the disease was giving way: the system being relaxed, attended with loss of appetite, disgust for medicine, and frequent pain and distress in the bowels.—Comfort.

Of the removal of morbid secretions or false membrane from the coats of the stomach and bowels.

In disease of every form and variety the stomach and bowels are more or less coated with thickened tenacious secretions, which are often thrown up by vomiting, in the form of little flakes of a skinny like substance; and passed off from the bowels sometimes in small pieces and at other times in strips a foot or more in length. The first that I ever saw of this false membrane was in the summer of '34. I had administered a course of medicine to a patient, and accidently discovered that a large quantity of a skinny like substance had passed from his bowels. This fact struck my attention at the time, and from that period to the present time, (1843,) I have found it to be universally present in all cases of disease, at least with a very few exceptions, and as a general rule disease begins to yield as this false membrane passes away. There is no plan of treatment that can be adopted that would prove as effectual in removing this coating of morbid matter from the stomach and bowels, as courses of medicine and a free use of cayenne pepper and bayberry. Avoid cathartics, as they occasion still greater derangement in the secretions, and if given freely to one in perfect health they will be very likely to occasion a false membrane to be formed on the mucous membrane of the bowels.

The indications of treatment are—to restore the secretions by courses of medicine, or by the use of pure stimulants and the vapor bath, together with the use of bayberry or other of the anticanker medicines.

An essay from the pen of the late Dr. Thomson of Edinburgh, appeared in a medical journal published in the year of 1836, in which the writer gives a considerable number of cases in which a false membrane was discharged from the bowels in different diseases, and patients affected with chronic diseases were restored to health after the passing off of the false membrane from the bowels, which sometimes closely resembled an intestine. The passing away of this substance in the cases reported does not seem to have been brought about by medical treatment, but rather by the efforts of nature, and generally after a sudden attack of fever, colic, or other acute attack of disease.

This subject, though of great importance in a medical point of view, has not to my knowledge ever engaged the attention of the medical profession in this country. Dr. S. Thomson in using the term "canker" has allusion to morbid secretions coating the stomach and bowels, and through his discoveries we are furnished with the knowledge of the best means to effect their removal.—Comfort.

# PHARMACY.

Pharmacy is that part of medical science which teaches the manner of preparing and compounding medicines for immediate use.

Materia medica gives us the description, properties, &c., of the various plants employed in the practice; but it affords us no information in relation to associating medicines together, and forming compounds, which is of the utmost importance, both to practitioners and families.

Physicians may possess a knowledge of the medical properties of the various medicines, and yet be exceedingly ignorant and

unskillful in preparing and compounding them for practical purposes.

#### EXTRACTS.

Extracts are those substances which result from the evaporation of the solution of vegetable plants, obtained either by boiling the vegetable, or by expressing the juice in the recent state.

# EXTRACT OF BONESET.

Take the weed while in full bloom, boil it in water tor four hours, then press out and strain the liquor, and let it stand an hour or two, until it is well settled. Then pour it off carefully so as to leave all the sediment, and boil down to the consistency of honey. It may then be put up in jars for use, and is a convenient and valuable preparation, and may be advantageously employed in most forms of disease. See properties and uses of boneset.

## EXTRACT OF BUTTERNUT.

Take the bark either of the roots or trunk of the white walnut, remove the outside portion, unless it should be of young trees where the bark is smooth, cut into small strips, and boil it for four hours, keeping it constantly covered with water. Then strain the liquor, and after it has settled pour it off, so as to leave the sediment behind, and then evaporate, by slow boiling, to the consistency of honey or sugar house molasses.

## EXTRACT OF SHEEP SORREL.

# (CANCER BALSAM.)

Take the common sheep sorrel when in bloom, bruise well in a mortar, and add a small quantity of water; then press the weed so as to obtain all the juice, strain it and place in the sunshine in a pewter dish, and let it evaporate to the consistency of honey. It is then ready for use, and should be put up in sealed boxes or closely stopped bottles, in order to prevent evaporation. This is the best cancer balsam.

# EXTRACT OF RED CLOVER.

Take any quantity desired of the blooms of red clover, boil in water until the strength is obtained, then separate the clover

blooms from the liquor, and, after carefully pressing out all the juice, return the liquor into the kettle, and continue the boiling with the utmost care to prevent burning, until reduced to the consistency of salve. To avoid all hazard of burning, the liquid, when boiled down pretty thick, should be put into an earthen or some suitable vessel, which must then be placed in a kettle of water over the fire, and the liquid thus evaporated until reduced to the proper consistence.

#### EXTRACT OF POKE ROOT.

Take the roots of the poke weed, cut them into small pieces, boil them until the strength is obtained, strain the liquor, and evaporate as above directed to a proper consistency for salve. For the mode of application and uses of this and the two preceding extracts, the reader is referred to the treatment of lencers, fistula, scrofula, &c.

#### POWDERS.

DIAPHORETIC OR COMPOSITION POWDERS.

Take of ginger three pounds, bayberry two pounds, cayenne one-quarter of a pound, cloves one-quarter of a pound, cinnamon one-quarter of a pound—all finely pulverized and thoroughly mixed. This is a safe and gentle stimulant, equalizing the circulation, strengthening the digestive organs, obviating costiveness, producing a moist condition of the skin, and in a word enabling the different organs of the body to perform their functions in a natural and healthy manner. It operates in harmany with the laws of the human system, and may be, therefore, safely employed in various forms of disease. It is particularly useful as a family medicine.

Dose.—To a teaspoonful of the powder, and an equal quantity of sugar, add a teacupful of boiling water, and drink the tea when sufficiently cool; there is no occasion for swallowing the sediment.

#### DR. THOMSON'S COMPOSITION.

Take of bayberry two pounds, ginger one pound, cayenne two ounces, cloves two ounces—all finely pulverized and well mixed.

Dose.—A teaspoonful in a teacupful of hot water sweetened.

# DIAPHORETIC OR SWEATING POWDER.

Take of butterfly root one pound, bayberry, bark of the root, one pound, sassafras, bark of the root, four ounces, colic root four ounces, ginger one pound, cloves two ounces, cayenne two ounces—all finely pulverized, and sifted through a fine sieve and well mixed.

Dose.—For an adult, one teaspoonful in hot water, sweetened if most agreeable. For children the dose must be proportionably less; and to make it more agreeable, cream or milk may be added as well as sugar.—Howard.

## SPICE BITTERS.

Take poplar bark one pound, golden seal one pound, prickly ash bark or berries one-half pound, bitter root one-quarter of a pound, loaf sugar two pounds—all finely pulverized, sifted, and well mixed. This preparation is one of the best medicines in use for restoring the tone of the digestive organs, and creating an appetite. It is an excellent remedy in jaundice, dyspepsia, flatulency, piles, headache, giddiness, pains in the stomach and bowels, strangury, flour albus, heartburn, and the whole train of chronic disease. It is a laxative, alterative and restorative.

Dose.—A level teaspoonful to a teacupful of hot water—to be drank when sufficiently cool. The proper time for taking the bitters, is fifteen minutes before each meal. If more convenient, they may be taken in a wineglassful of cold water in substance.

# HOWARD'S FORMULA.

Take of poplar bark one pound, bayberry (bark of the root) one pound, golden seal one pound, cayenne four ounces, cloves four ounces—loaf or lump sugar in quantity equal to all the other articles. The whole finely pulverized, sifted, and well mixed.

Dose.—One teaspoonful in either hot or cold water; or the powders may be taken into the mouth, moistened with the saliva and swallowed, or washed down with cold water.

# COMFORT'S FORMULA.

"Take of black and white aspen poplar bark finely powdered, each three pounds, of ginger two pounds, golden seal two pounds,

cinnamon one pound, cloves one pound, prickly ash bark half a pound, cayenne half a pound, and eight or nine pounds of white sugar. These are all to be finely pulverized, thoroughly mixed together, and then run through a seive. Next to composition and No. 6, the spice bitters are more employed than any medicine, or compound, in the Thomsonian Materia Medica. The usual dose is a teaspoonful, prepared in decoction with boiling water, or the powder may be taken with a small portion of luke-warm or cold water. The spice bitters, prepared according to the above formula, afford a mild stimulant and tonic, which may be used with great benefit in many cases, and with safety under all circumstances. As a tonic in intermitting and remitting fever, and in cases of extreme debility and obstinate dyspepsia, the spice bitters are not to be relied upon, as stronger tonics will here be demanded.

Adding finely powdered myrrh and unicorn root to the common spice bitters in equal quantity with the cloves, constitutes what are termed ladies' spice bitters or woman's friend. This preparation is well adapted to cases of general debility, and especially in complaints peculiar to females."—Comfort.

#### BITTER TONIC.

Take of poplar bark one pound, golden seal one pound, bayberry (bark of the root) one pound, columbo root one pound, capsicum six ounces, cloves six ounces, loaf or lump sugar four pounds twelve ounces—being a quantity equal to all the other articles. All to be finely pulverized, sifted, and well mixed.

Dose.—One teaspoonful in either hot or cold water; or the powders may be taken into the mouth, moistened with the saliva and swallowed, or washed down with cold water. One ounce of these bitters added to a quart of wine, dose a wineglassful three times a day, is an excellant preparation.

To make laxative bitters, add one pound, more or less, of the bitter root, or of the black root, to the foregoing compound, increasing in the same proportion, the quantity of capsicum, cloves, and sngar.—Howard.

# ANODYNE POWDERS.

Take of prickly ash (the bark or berries) four ounces, unicorn

root four ounces, ginger four ounces, loaf sugar one pound—all finely pulverized, sifted, and thoroughly mixed. Dose—a teaspoonful three times a day. These powders are useful in menstrual derangements, bearing down pains, and affections of the kidneys, bladder, or womb; and especially during pregnancy, and in labor, they are an excellent corrector, prompter, and alleviator.

#### ANOTHER FORMULA.

Take of blueberry six ounces, prickly ash berries four ounces, red raspberry leaves four ounces, best ginger two ounces, cayenne one-quarter of an ounce—mix thoroughly.

Use.—Valuable in regulating parturient pains, allaying false pains, and other affections common to pregnancy.—Wilkinson.

# HEADACHE SNUFF.

"Take finely powdered bayberry, and scent it with the oil of spicy wintergreen or golden rod. This is useful in head-ache and colds. I know an inveterate snuff-taker, who has substituted it for the preparations of tobacco. It has been employed beneficially in polypus of the nose, but is not so efficient as the powdered blood-root."—Mattson.

#### FEMALE RESTORATIVE.

Take of nervine four ounces, balmony four ounces, poplar bark four ounces, unicorn four ounces, prickly ash four ounces, cinnamon four ounces, myrrh four ounces, cayenne four ounces, loaf sugar two pounds—pulverize, sift, and mix thoroughly. This is an excellent tonic and stimulant, and is a suitable remedy for the complaints of females, such as fluor albus, weakness of the uterine organs, and irregularity of the menstrual discharges. It is, likewise, beneficial in restoring the appetite, and useful in dyspepsia, worms, diarrhea, coughs, asthma, difficulty of breathing, a low or exhausted state of the system, &c. It is a good medicine, both before and after child-birth, especially if the organs concerned in parturition are weak or debilitated.

Dose.—A teaspoonful of the powder in a teacupful of hot water sweetened.

#### STYPTIC POWDER.

Alum-root, finely pulverized and sifted through muslin, exerts greater power in suppressing hemorrhage, than anything within my acquaintance. The powder must be applied directly to the wound, and confined by means of a bandage. For bleeding at the nose, the powder should be snuffed up the nostril. If this cannot be done, a teaspoonful of the powder may be steeped for ten or fifteen minutes in a half teacupful of boiling water, and this thrown up the nose with a small syringe; or a small roll of lint, well saturated with it, may be repeatedly introduced so as to come in contact with the ruptured vessel.

In this way it may also be applied in dangerous hemorrhage from the uterus, but should not be continued after the hemorrhage is arrested.

#### TONIC POWDERS.

Take of golden seal one pound, balmony one pound, poplar bark one pound, columbo root one-half pound, prickly ash one-half pound, cloves one ounce, capsicum one ounce, loaf sugar three pounds—finely pulverized and well mixed.

Use.—This is superior to any other tonic powder with which we are acquainted. It is exceedingly valuable in the treatment of dyspepsia, debility, loss of appetite, and, in short, whenever a tonic medicine is required. It strengthens and invigorates the whole system.—Wilkinson.

# COUGH POWDER.

Take of pleurisy root four ounces, water-robin two ounces, nervine one ounce, lobelia seed, pulverized, one-half ounce, cayenne one-quarter of an ounce. This is good in cough, &c.

Wilkinson.

#### TOOTH POWDERS.

Take equal parts of bayberry and prickly ash bark, pulverize finely, mix and sift. It is then ready for use.

This powder has no equal in cleansing the teeth of offensive matter, and thereby affording protection, both against toothache and an offensive breath. To give this remedy a fair trial, the teeth should first be washed with warm water, diluted with a little salæratus, and then rubbed with the powders, by means of a hair toothbrush. Let this process be repeated two or three times a day, and instances of toothache will soon become like unto "angel visits."

#### PILLS.

These are small round substances, composed of vegetables and designed for internal use. They generally require a longer time to operate than medicine given in the form of powder; but form a very convenient mode of administering medicine, particularly it it is very disagreeable, as the taste is concealed.

#### AGUE PILLS.

Take of sulphate of quinine one ounce, ptelea one ounce, prickly ash one ounce, best African bird pepper one ounce—all finely pulverized, well mixed, and rolled into pills with the extract of boneset. The pills should be about the size of an English pea.

I have used this medicine for several years in an extensive practice, and having watched its effects in numerous cases, and on all the variety of constitutions from infancy to old age, I now feel myself fully prepared to recommend it to the public, as being a safe and certain cure for chills and fevers in their various forms, and also as an excellent medicine in all debilitated cases of disease.

DIRECTIONS FOR ADMINISTERING.—For chills and fevers, commence three hours before the time for the expected chill, and take one pill every twenty minutes, until the time for the chill is passed, and pursue the same course before the time for the next chill, and the next.

# VEGETABLE CATHARTIC PILLS.

Take of rhubarb two ounces, gamboge one ounce, black root one ounce—all finely pulverized, well mixed, and rolled into pills with butternut extract. This medicine I have used extensively, and much to my own satisfaction. It may be used whenever a cathartic is necessary, either for man, woman or child.

Dose.—Varying from one to six pills, according to age and constitution.

#### TINCTURES.

Tinctures are solutions of medical substances, prepared by maceration or digestion in alcohol. They are used both internally and externally.

#### TINCTURE OF LOBELIA.

Take one pound of the finely pulverized leaves of lobelia, one-half gallon of pure alcohol, and the same quantity of pure soft water, mix, and digest in summer heat, for four or five days, shaking it two or three times a day. The liquor may then be carefully poured off so as to leave the sediment, and bottled for use.

This is a convenient remedy, valuable in asthma, coughs, tightness of the breast, and difficulty of breathing, beneficial as a wash in tetter, and similar eruptions. Where an infant is restless, and will not sleep, six or eight drops of it may be administered in a teaspoonful of warm water sweetened, with the most favorable result. The dose may be repeated if necessary, and also increased in quantity. It is far preferable to any preparation of opium. This medicine may be efficiently employed as an emetic.

Dose.—For an adult, tablespoonful given in composition, or some warm stimulating tea, and repeated every fifteen or twenty minutes, until the stomach is sufficiently cleansed.

Dose.—For a child two years old, teaspoonful repeated as above.

## THIRD PREPARATION OF LOBELIA.

## (ANTI-SPASMODIC TINCTURE.)

Take two pounds of lobelia seed, finely pulverized, one pound of nervine, one pound of cayenne, two gallons of alcohol. Digest in sun heat, in a closely stopped vessel, for three or four days, shaking it two or three times a day. The liquid only is to be used and not the dregs, since the latter have no strength. This is an invaluable preparation, and is used in violent cases of disease, such as locked-jaw, epilepsy, convulsions, croup, delirium tremens, fainting, hysterical attacks, apoplexy, poisoning, hydrophobia, and suspended animation. It traverses the system with

wonderful rapidity, and rarely fails to restore the patient. In locked-jaw, where the teeth are rigidly clenched, the liquid should be poured into the mouth between the teeth, and as soon as it comes in contact with the parts about the throat, the spasms will yield and the jaws open. Epileptic patients should carry a phial of this preparation about their persons, and swallow a portion of it whenever threatened with a convulsion.

If any individual is rendered insensible by a fall, blow, or injury of any description, this preparation may be employed with the greatest advantage, and is much more speedy and effectual in rousing the dormant energies of life, than any mode of treatment which has ever been devised by the medical faculty. Every physician should supply himself with a bottle full of it, as a substitute for the lancet.

Dose.—A teaspoonful frequently repeated until relief is obtained, and if the patient is in a condition to swallow readily, it may be administered in composition tea.

"Tincture of the Leaves of Lobelia.—Take of the pulverized leaves of lobelia, five ounces; water and spirits, equal parts, one quart. Infuse for ten days in a closely stopped bottle, and strain."—Mattson.

"TINCTURE OF THE GREEN HERB OF LOBELIA.—Collect the herb in autumn, before the leaves begin to fade; pound it in a mortar until it is reduced to a pulpy mass; add Malaga wine sufficient to cover it; infuse for a week or ten days and strain.

This is pleasant to the taste, and upon being swallowed, can scarcely be distinguished from the wine. After a few moments, however, the pungency of the lobelia is experienced in the mouth and throat. This preparation is a very convenient one for children."—Mattson.

# TO PREPARE LOBELIA SEED WITH SUGAR.

Take the seeds of lobelia, finely pulverized, one pound, and one pound of white sugar—pulverize them well together (the sugar being designed to absorb the oil); then add a quarter of a pound of nervine powder, half a pound of cayenne, and one gallon of improved rheumatic drops.

Dose.—Two teaspoonsful for an adult, in a gill of bayberry, or composition tea.—Thomson.

#### THOMSON'S RHEUMATIC DROPS.

Take one gallon of high cherry spirits, one pound gum myrrh, four ounces golden seal, four ounces bayberry, one ounce cayenne; mix and shake once a day for several days. The solid article must be pulverized.

#### TINCTURE OF LOBELIA SEED.

Put one pound of the seed finely pulverized into a gallon bottle, fill the bottle with the best alcohol, and infuse for ten days in sun heat, occasionally shaking it. The properties of this preparation are relaxant, anti-spasmodic, stimulant, and sudorific.

Dose.—As an emetic, a teaspoonful given in a half teacupful of composition tea, and repeated every ten minutes until the object is attained.

#### HYDRAGOGUE TINCTURE.

"Take one pound of the bark of sweet elder, one gallon of good wine; let it simmer an hour over a slow fire, strain and bottle for use.

"Dose.—A wineglassful three or four times a day. This tincture is usefully administered in dropsical affections, particularly in abdominal dropsy, or ascites. It has cured many without any other ingredients."—American Practice.

#### TINCTURE OF CAYENNE.

Take of cayenne one pound, alcohol one gallon. Infuse for ten days in sun heat, and strain.

This is a valuable external application for swellings, burns, &c.; and is particularly beneficial in palsy, and a wasting of the limbs, where ordinary stimulating washes produce no effect.

#### TINCTURE OF SCULL-CAP.

Put one pound of scull-cap into a three quart bottle, fill the bottle with good spirits, and infuse for ten days in sun heat. [See properties of scull-cap.]

#### TINCTURE OF PRICKLY ASH.

Take one pound of the berries finely pulverized, put them into a gallon tineture bottle, and fill the bottle with good alcohol. Infuse for three or four days, occasionally shaking it; it is then ready for use.

Dose.—From a teaspoonful to a tablespoonful, diluted in water and sweetened. This preparation is useful in all rheumatic affections, cholera, flatulency, hysteria, hypochondria, &c.

## TINCTURE OF SKUNK CABBAGE.

Take one pound of the root of skunk cabbage finely pulverized, put it into a gallon tincture bottle, and fill the bottle with good alcohol. Infuse in a sunheat for three or four days, occasionally shaking it, when it will be fit for use.

Dose.—From ten drops to a tablespoonful, according to age, disease, constitution, &c. This tincture is useful in all cough complaints, worms, hives, croup, &c.

# TINCTURE OF NERVINE.

Take one pound of the finely pulverized roots of lady slipper, and a half gallon of best alcohol. Digest for ten days in a sunheat, shaking it well two or three times a day, when it will be fit for use.

## NERVINE TINCTURE.

"A valuable tincture is made by infusing four ounces of the above powder in a pint of alcohol or brandy, placed in a hot sunheat, often shaking, for ten days; when it may be poured off, strained, or filtered, and add of the essence of anise one ounce.

"Dose.—From one teaspoonful to a tablespoonful."—Howard.

# DROPS-ANODYNE DROPS.

Take of the tineture of scull-cap one pint, prickly-ash one pint, essence of anise one pint, loaf sugar one pound. Mix.

Dose.—A tablespoonful. It may be safely employed in any form of disease.

# HOWARD'S ANODYNE DROPS.

Take of compound tincture of valerian one pint, colic drops one

pint, diaphoretic drops one pint, essence of anise one pint, simple tincture of valerian four pints. Mix and shake well together.

Dose.—From one teaspoonful to one tablespoonful, in twice the quantity of water, repeated at discretion until relief is obtained. These drops are good for pains of every description, particularly in the stomach, bowels, or head. Also, for cholera morbus, diarrhea, dysentery, &c., to be taken alone, or mixed with tea of the anti-morbific, anti-dysenteric, or astringent powders.

# ANTI-COLIC DROPS.

Take of oil of anise one ounce, oil of peppermint one ounce, oil of hemlock one-half ounce, oil of cedar one-half ounce, oil of cloves one-half ounce, oil of cinnamon one-half ounce, gum guiacum four ounces, alcohol one quart.

These drops are exceedingly efficacious in the colic. We have used them in an extensive practice of five years, and never knew them fail of giving immediate relief in the most obstinate cases of colic. They are also very useful in the treatment of chrouic rheumatism, pains in the chest, sides, back, &c.

Dose.—The dose must be governed by the nature of the disease, and the urgency of the case. For the colic, give from thirty drops to a teaspoonful every few minutes, until relief is obtained. Wilkinson.

# COUGH DROPS.

Take of oil of anise one ounce, balsam of fir one-half ounce, liquorice ball one-half ounce, tincture of lobolia two ounces, alcohol one pint.

These drops are highly useful in obstinate coughs. They assist expectoration.

Dose.—A teaspoonful occasionally.—Wilkinson.

#### RESTORATIVE DROPS.

Take of golden seal two drams, lady slipper two drams, asarum canadense two drams, bitter root two drams, poplar bark two drams, black root two drams, alcohol one pint. Digest for ten days. Pour off, and add a pint of No. 6. We have found these drops useful in a variety of diseases. They are excellent for the

bilious colic, particularly after the stomach has been cleansed by an emetic of lobelia. We have also found them valuable in the treatment of many chronic diseases, such as dispepsia, liver complaint, &c. Dose—a teaspoonful several times a day.—Wilkinson.

# COUGH DROPS.

Take of oil of anise one-half dram, oil of almonds one half dram, balsam of fir one-half dram, tincture of balsam tolu one half dram, wine one-half dram—mix. Dose—thirty drops three or four times a day. Use—these drops should be given in a little mucilage or tea. They assist expectoration in tickling coughs, and afford great relief.—Beach.

## ANTI-EMETIC DROPS.

Take of fine salt two ounces, cayenne one ounce, vinegar one quart—mix. Dose—a tablespoonful whenever there is great nausea or vomiting.

#### TOOTHACHE DROPS.

Take of oil of lobelia one-half ounce, oil of cinnamon one-half ounce—mix. Saturate a small roll of lint or cotton in the liquid and put it in the tooth.

## CARMINATIVE DROPS.

Take angelica four ounces, wild valerian two ounces, calamus one-half ounce, anise, dill and fennel seeds, each one ounce, catnip blows or leaves, and motherwort, each a large handful, pleurisy root four ounces. Infuse the whole in two quarts of brandy or good common spirits, and digest in a moderate heat for twenty-four hours; then press out and strain the liquid, and add to it half a pound of loaf sugar. When settled, bottle it for use.

Dose.—For children, from ten to sixty drops, according to the age; for adults, from one to four teaspoonstul in a cup of warm

tea. It may be repeated once in four or six hours.

Use.—It eases, pain, creates a moderate perspiration and produces a refreshing sleep; is good for restless children, removes flatulency and wind colic, and is useful in hysteric and nervous affections, female debility, &c.—Beach.

# SYRUPS-CHOLERA SYRUP.

Take of bayberry one pound, poplar bark one pound, golden seal one-half pound, scull cap one-half pound, cinnamon one-half pound, prickly ash one-half pound—all finely pulverized, [well mixed, and boiled in four gallons of pure water for two hours. Then strain, and reduce to one gallon by simmering over a slow fire, and add one gallon of molasses, one gallon of No. 6, or compound tineture of myrrh, and a half gallon of best French brandy.

This syrup is an excellent remedy in diarrhea, and the forming

stages of dysentery and cholera.

Dose.—For an adult, from a half to a wineglassful, repeated every two hours until a cure is effected. It is also useful in cases of worms, summer complaints of children, pains and sourness of the stomach or bowels. Dose for a child twelve months old, a teaspoonful repeated every hour until relief is obtained.

#### HIVE OR CROUP SYRUP.

To one pound of bayberry, and one pound of the fresh leaves of lobelia, add one gallon of boiling water, and steep in a large coffee pot by the fire for one hour. When settled, pour off, strain, and add one quart of molasses, and alcohol sufficient to preserve it—bottle for use.

In violent cases of croup, give a teaspoonful in strong sage tea, sweetened, and repeat every fifteen minutes until relief is obtained, or the patient vomits freely.

In common cases of hives, give ten drops, in some warm tea, as sage, balm, mint, thyme, &c., repeating every hour until the patient is freed from the disease.

## COUGH MIXTURE.

Take of the common May cherries, when perfectly ripe, one quart, molasses one quart; simmer the cherries in the molasses for one hour over a slow fire, then press them so as to obtain all the juice, and to each quart of the syrup add one pint of the tincture of prickly ash berries and half pint of the tincture of lobelia, and one-half pint of the tincture of skunk cabbage. It may then be bottled for use.

This mixture is useful in all cases of cough, disease of the

chest, consumption, asthma, bronchitis, whooping cough, common colds, &c.

Dose.—A teaspoonful for an adult; for children in proportion, according to age, constitution, &c.; to be taken every six hours, regularly, and repeated, whenever the cough is violent, every half hour until relief is obtained. This remedy will be rendered more certain and efficacious by taking a teaspoonful of composition powders, in a teacupful of warm water, sweetened, three times per day, morning, noon and night.

#### BUTTERNUT SYRUP.

Take of extract of butternut one quart, molasses one quart, alcohol one quart—mix and bottle for use. This syrup is useful in bowel complaints, worms, &c. When given for worms, it should be given in molasses, and repeated every four hours until it operates. It is a mild cathartic, and may be used when a medicine of this kind is necessary, either for adults or children.

Dose.—A teaspoonful for a child twelve months old, to be diminished or increased, according to age, constitution, &c.

# BLACKBERRY SYRUP.

Take one pound of the bark of the roots of blackberry, well cleansed, add one gallon of water, and boil for an hour; when settled, pour off, strain, and reduce the liquid to two quarts, by evaporation over a slow fire, and add two pounds of loaf sugar, and, when cool, a pint of best alcohol.

Dose.—A tablespoonful three times a day.

Use.—This syrup is exceedingly valuable in bowel complaints, particularly in those of a chronic form. It will frequently effect a cure when every other means fail. It seems to possess specific virtues, different from most substances. Should the disease not be arrested after taking it a day or two, the dose may be gradually increased as the stomach can bear it.

# TONIC AND LAXATIVE SYRUP.

Take of balmony one pound, golden seal one pound, bitter root one pound, poplar bark one pound, columbo root one pound, sarsaparilla one pound, black root one-half pound, elder flowers onehalf pound—make a very strong syrup by boiling and pouring off repeatedly, or until the strength is entirely extracted; then to three gallons of the syrup add two gallons of molasses. Now add a quart of essence of peppermint, and the same amount of essence of sassafras.

Dose.—From one to three tablespoonsful three or four times a day.

Use.—This syrup excels any other with which we are acquainted in obviating constipation and producing a healthy action in the stomach and bowels. Hence it is exceedingly valuable in the treatment of the entire catalogue of chronic diseases. With us, this syrup stands pre-eminent. We have, with it, performed some remarkable cures. In dyspepsia, liver complaint, constipation, debility, loss of appetite, &c., we could not dispense with it.—Wilkinson.

#### CORDIALS—TONIC CORDIAL.

Take of poplar bark one pound, golden seal one pound, bayberry one-quarter of a pound, ptelea one-quarter of a pound boil in three gallons of water for half an hour, in a closely covered vessel; when settled, pour off the liquid carefully, so as to leave the sediment. Then strain and reduce, by slow evaporation, to one gallon and a half, to which add one gallon of the best alcohol and eight pounds of white or loaf sugar. Bottle for use.

This is a very valuable compound, useful in all cases of debility, also in bowel complaints, either of children or adults.

Dose.—A half wineglassful three or four times a day.

## RESTORATIVE CORDIAL.

Take of balmony four ounces, spikenard root four ounces, comfrey root four ounces, prickly ash berries two ounces, liquorice root two ounces, pleurisy root two ounces, poplar bark two ounces, chamomile flowers two ounces. Add a sufficient quantity of water. Boil and pour off repeatedly, until the strength is fully extracted. Then to a gallon of the syrup add half a gallon of molasses and a quantity of strong essence of peppermint.

Dose.—Half a wineglassful three times a day.

Use.—This cordial is usefully employed in the treatment of female debility, fluor albus, amenorrhea, &c.

## LINIMENTS-RHEUMATIC LINIMENT.

Tincture one pound of finely pulverized lobelia seeds in a gallon of the best alcohol, for ten days, then pour off so as to leave the sediment, and add one gallon of strong tincture of cayenne, one pint of oil of cinnamon, one pint oil of sassafras, one pint oil of cedar, and one pint oil of cypress or juniper. Mix well and bottle for use.

This preparation is useful in all painful affections, sprains, bruises, tumors, &c. For rheumatism, the parts affected should be bathed three times a day, before a warm fire, using much friction with the hand. For headache, bathe the back of the head and neck, also bathe slightly from the front of the head back to the ears, just at the edge of the hair.

For all other affections for which it is recommended, apply it over the diseased parts, warmed by the fire.

### STIMULATING LINIMENT.

Take one quart of tincture of cayenne, one pint of tincture of prickly ash, one pint of tincture of scull cap, one gill of oil of cinnamon, one gill of oil of sassafras—mix and bottle. This liniment is useful in all cases in which external stimulants are indicated, and is excellent for bathing the feet and legs with, to prevent chills, and check collapse in fevers, and may be used instead of the rheumatic liniment.

# RELAXING LINIMENT-NERVE LINIMENT.

Take of tincture of lobelia seeds one pint, tincture of nervine one pint, tincture of spignet one pint, olive oil one pint and a half. All put into an iron vessel and evaporated over a slow fire until reduced to a quart. It is then ready for use. This liniment is useful in all painful swellings, tumors, contracted muscles, tendons, and all affections of the nerves, as neuralgia of the face, &c.; it may likewise be used in parturition to great advantage, from its relaxing influence and its great power in allaying nervous irritation.

### STIMULATING LINIMENT.

Take of gum elastic, cut into shreds, four ounces, linseed oil a pint. Simmer these over a slow fire, stirring constantly, until the gum is dissolved, which will be in five or six hours. Then add three-quarters of a pound of fresh beef's tallow, and continue the simmering until it is melted. When about blood heat, add an ounce each of the oils of cedar and hemlock, and a wineglassful of the best anti-spasmodic tincture, stirring them well together.

Uses.—This liniment is highly serviceable as an application to the surface of the body after a vapor bath, or a course of medicine, particularly in the winter season. The skin should be rubbed with it thoroughly from head to foot. Patients who are laboring under chronic diseases, and possess but little animal heat, are greatly benefitted by this practice. The liniment forms a coating for the skin, and shields it from the air, without interfering at all with its functions. In night sweats, rheumatism, ague and fever, asthma, croup, consumption, dyspepsia, and tic-douloureux, it may always be employed with advantage. If not sufficiently stimulating, it may be combined with a portion of cayenne, reduced to a very fine powder.—Mattson.

# LINIMENT FOR RHEUMATISM, &c.

Take of alcohol a pint, tincture of cayenne two ounces, oil of camphor two ounces, spirits of hartshorn one ounce, camphor one ounce, oils of cedar and spearmint, each half an ounce—mix, and shake well together.

Uses.—This is applied externally with the hand, using considerable friction. I have cured several very severe cases of rheumatic pains with this remedy alone.—Mattson.

# RHEUMATIC LINIMENT.

Take of No. 6 one-half a gallon, tincture of camphor one pint, oil of cedar one ounce, oil of hemlock one ounce, oil of sassafras one ounce, oil of peppermint one ounce. This makes an excellent liniment for rheumatic pains, paralysis, &c. It should be applied to the part affected with the hand, and the parts thoroughly rubbed for five or ten minutes. Apply it four or five times a day.—Wilkinson.

# STIMULATING AND RELAXING LINIMENT.

Take of No. 6 one-half gallon, tincture of lobelia one quart, spirits of turpentine one-half pint, anti-spasmodic drops one-half pint, beef's gall one-half pint, oil of sassafras one ounce, oil of hemlock one ounce.

Use.—We have proved this liniment to be very valuable in all those cases requiring the use of this class of remedies. It is very useful in stiff joints, and parts that have lost their sensibility. It should be applied with considerable friction.—Wilkinson.

# MISCELLANEOUS PREPARATIONS — NEUTRALIZING MIXTURE OR PHYSIC.

Take of rhubarb pulverized two scruples, salæratus pulverized two scruples, peppermint plant pulverized two scruples. Add a half-pint of boiling water, sweetened with loaf sugar, and add a tablespoonful of brandy.

Dose.—One or two tablespoonsful every quarter, half, or one or

two hours, according to symptoms.

Use.—This is one of the most valuable preparations known for cholera morbus, cholera infantum, or summer complaint of children, diarrhea, dysentery, &c. Its operation and action appear to be specific, or almost infallible.—American Practice.

## EYE WATER.

Take of golden seal one ounce, bayberry one ounce, lobelia leaves one ounce—mix; put them in a suitable vessel, and pour a quart of boiling water on them. After standing an hour, pour off the liquid so as to leave the sediment; add one pint of best alcohol, filter through paper, and bottle for use.

## VEGETABLE CAUSTIC.

Take the strong ley of hickory ashes, and evaporate in an iron kettle, over a slow fire, until dry, and then press it in closely stopped bottles.

Use.—This caustic is highly useful in the treatment of cancers,

ulcers, tumors, fistula, &c.

The following valuable recipes are from the pen of Dr. A. C. Logan:

# STIMULATING EMBROCATION FOR CONTRACTED SINEWS, &c.

1st. Take of oil of monarda, horsemint, two ounces, oil of sassafras three ounces, oil of wormwood ounce and a half, turpentine three ounces, oil neat's foot three ounces, gum camphor three ounces—mix. Opodeldoc superior to that of the shops, as it contains several essential oils which the shop preparations do' not-

2d. Take of white Spanish soap, shaved in very thin flakes, ten ounces, gum camphor two ounces, oil origanum two drams, oil amber four drams, oil rosemary four drams, oil turpentine one ounce, oil monardo four drams, oil sassafras four drams, oil wormwood two drams, aqua ammonia two drams, alcohol two quarts—mix; put in a sandheat, shaking it frequently, or set it in the sun from five to eight days in the summer.

Stimulating oil and embrocation for paralysis, rheumatism, &c. (The oil must be used first, then the embrocation.)

## OIL.

Take of British oil twenty-four ounces, oil amber four ounces, oil spike six ounces, olive oil four ounces, tincture capsicum two ounces.—These articles to be diluted one-half with neat's foot oil when used.

# EMBROCATION.

Take of oil hemlock two and a half ounces, oil wintergreen one and a half ounces, oil lemon one ounce, oil cinnamon one and a half ounces, oil origanum two ounces. Mix. These articles to be diluted one-half with whisky when used.

# EMBROCATION FOR SPRAINS AND LUMBAGO, RHEUMATISM, &c.

Take of pulverized sal ammoniac one ounce, spirits of hartshorn four drams, spirits lavender (or better) oil spike four drams, oil turpentine one-half pint. Mix.

## BLEEDING OF THE NOSE.

Make of pulverized bloodroot fourteen ounces, gum arabic two and a half drams, catechu one dram, pulverized aleppo galls one-

half dram. Mix. Snuff a small pinch, or blow into the nose slightly with a quill.

## TONIC AND ALTERATIVE PILLS.

Take of pulverized green lobelia one teaspoonful, pulverized nerve powder two teaspoonsful, pulverized No. 2 one-quarter of a teaspoonful, pulverized gum myrrh one-half a teaspoonful; add No. 6, and make into pills with gum arabic.

### TONIC PILLS.

Take of capsicum one-half dram, ginger two drams, rhubarb one-half dram, extract gentian two drams—mix and make into one hundred and fifty pills. Red bud leaves (or Judas tree) may be used for canker when No. 3 cannot be had.

## STYPTIC.

Take of fourth proof brandy two ounces, Castile soap two drams, potash (not pearlash) one dram. Dissolve the soap in the brandy warm, then add the potash and shake it well; when used for a wound or bleeding gum, warm it, and dip lint into it and apply it to the wound.

# CURE FOR BLINDNESS FROM GUTTA SERENA.

Take best capsicum one grain, infuse in a wineglassful of distilled water, let it stand twenty-four hours, and then filter it; and lay the patient on the back and wash the eyes several times a day until cured.

## ASTHMA.

Give composition, nervine, No. 2 and No. 3 in bed, with hot bricks to the body and feet; when in a free perspiration, give a teaspoonful of the second preparation of No. 1, every ten or fifteen minutes until emesis is relieved.

# FOR FRESH CUTS AND BURNS.

Take the fresh leaves of the common snap or French bean, rub them soft, and apply to the wound; they will heal in a very short time, without pain or inflammation.

### POLYPUS OF THE NOSE.

Take bloodroot dried and pulverized, and bloodwort, (hieracium venosom) the same, of each one teaspoonful, mix thoroughly with half a teaspoonful of pulverized allum; if the complaint is recent and not severe, one-fourth of a teaspoonful will suffice. This mixture to be taken as snuff, four pinches a day.

# CURE OF QUINSY.

Take one teaspoonful of the best capsicum, add one tablespoonful of water, and gargle the throat with it as long as the inflammation continue, at the same time use a dose of bitter-root (a teaspoonful) twelve hours apart, three times.

Infusion of hops, kercuma and life-everlasting; an excellent wash for ulcers and eruptions on the skin.

The May apple root, bruised, will act immediately as a styptic for external bleedings.

Solomon's seal, the species that has seed on the end of the stalk (convallaria, stella, vel trifolia, vel racemosa); the root bruised, an excellent application for fresh cuts and swelled legs.

Scull-cap (scutellaria hysopifolia). Infusion of the leaves (strong), an excellent nervine, useful particularly in tic-doulureux. Mix with molasses, a gill a dose.

## TO STOP BLEEDING OF THE NOSE.

Make a strong decoction of witch hazel leaves and bayberry root bark, and add No. 6. Drink and inject the same up the nose.

A plaster of balsam of fir will immediately heal bad wounds.

# FOR A SETTLED COLD IN THE FACE.

Wormwood and hops stewed in vinegar, and to be thickened with bran or Indian meal.

## BURNS.

Yarrow, made into a poultice, is an excellent remedy, (it is much used by the Indians).

## TUMORS.

Equal quantities of beef's gall and hog's lard, made into a salve, and rub the part.

Mechamock or bind weed. In powder or decoction, much used in the south for gravel; an infusion, in general, will enable the patient to pass calculous granules with much ease.

To prove the soundness of the lungs. Let the patient draw in a full breath, and then begin to count as far as he can, slowly and audibly, without again inflating the lungs. The number of seconds he can continue, is then to be carefully noted. In confirmed consumption, the time does not exceed eight, and is often less than six seconds. But when the lungs are sound, the time will range as high as from twenty to thirty seconds.—A. C. Logan.

# VEGETABLE CATHARTIC POWDERS.

Take of rhubarb two ounces, gamboge one ounce, black root

one ounce; pulverize finely and mix thoroughly.

Dose.—When a brisk operation is desirable, give a half teaspoonful, or ten grains of the powder, mixed with a teaspoonful of sugar, and diluted in a teaspoonful of warm water. The dose may be repeated, if it does not operate in from four to six hours.

## NO. 6.

Take a half pound of gum myrrh, one ounce of best cayenne, and one ounce of golden seal, all finely pulverized; infuse in a stone jug with one gallon of best alcohol for three or four days in sun heat, shaking it two or three times a day.

## WINE BITTERS.

Take of prickly ash bark or berries two ounces, balmony two ounces, golden seal two ounces, aspen poplar two ounces; all finely pulverized, and boiled for an hour in one gallon of water, then settle, strain, and boil again until reduced to one quart, to which, when cool, add one gallon of best port wine, and bottle for use.

Use.—This preparation is an agreeable restorative and is useful in dispepsia, loss of appetite, faintness, sinking at the stomach, heart burns, flatulency, drowsiness, head ache, and all diseases dependant upon a deranged condition of the digestive organs. It is beneficial also to persons recovering from sickness, taken after a meal to relieve the distress occasioned by indigestible food, or the unpleasant sensations which accrue from an overloaded stomach.

Added to cold water it makes a refreshing and wholesome drink. Dose.—A half wine glass full, more or less, according to circumstances.

## ALTERATIVE POWDERS.

Take of bitter root one ounce, burdock one ounce, sarsaparilla one ounce, unicorn one ounce, prickly ash one ounce. Pulverize the articles finely and mix thoroughly.

Dose.—A teaspoonful.

## FEMALE STRENGTHENING BITTERS.

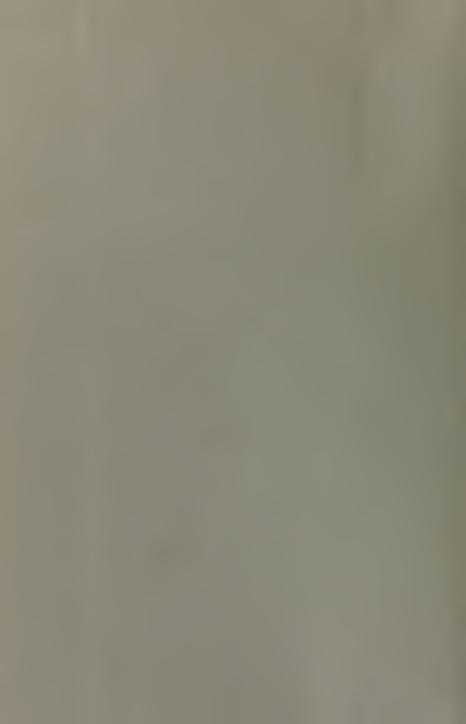
Take of prickly ash one ounce, poplar bark one ounce, bayberry one ounce, golden seal one ounce, unicorn one ounce, cayenne one ounce; all finely pulverized and well mixed.

Dose.—A teaspoonful steeped in a half teacupful of boiling water, and given three or four times a day, sweetened to suit the taste. There is no occasion for taking the sediment.

### PILE SALVE.

Take one pint best alcohol, one pound gum camphor, one pint tincture of scull cap, one pound of beef's tallow or mutton suet; simmer, over a slow fire, in an earthen vessel, for one hour, constantly stirring. Box or bottle for use. This is a useful application for piles, tumors, external swellings, &c.





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